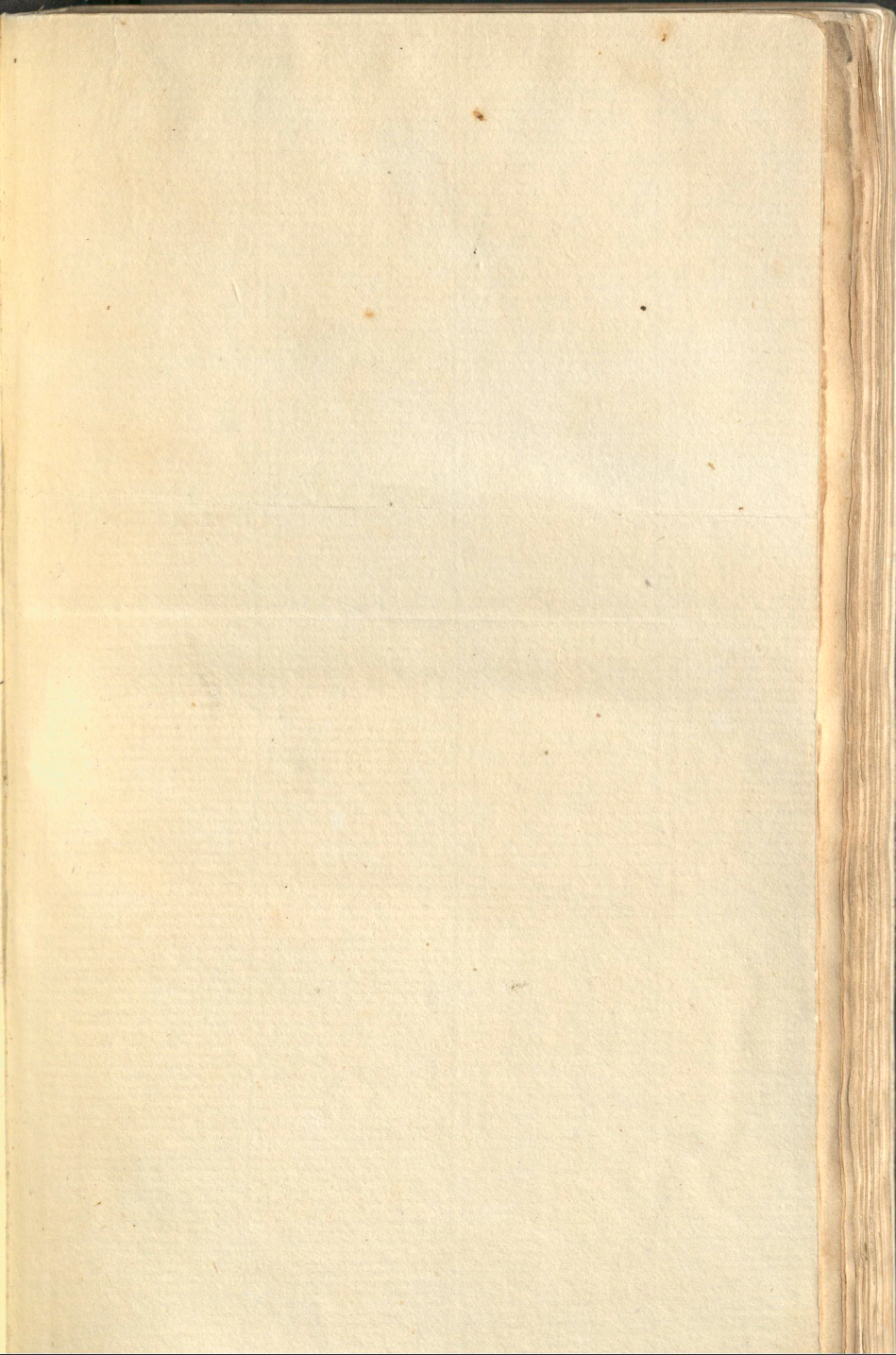


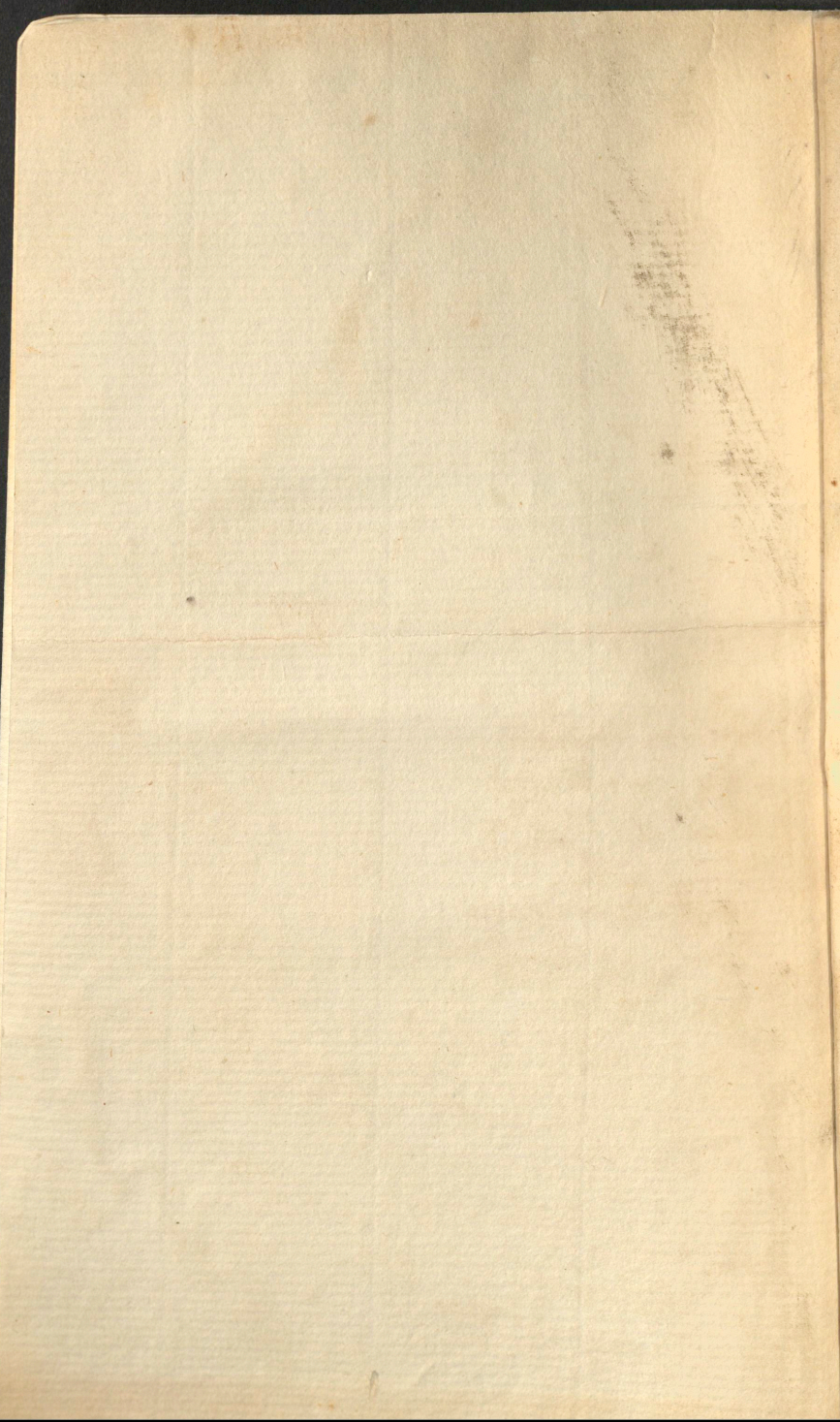
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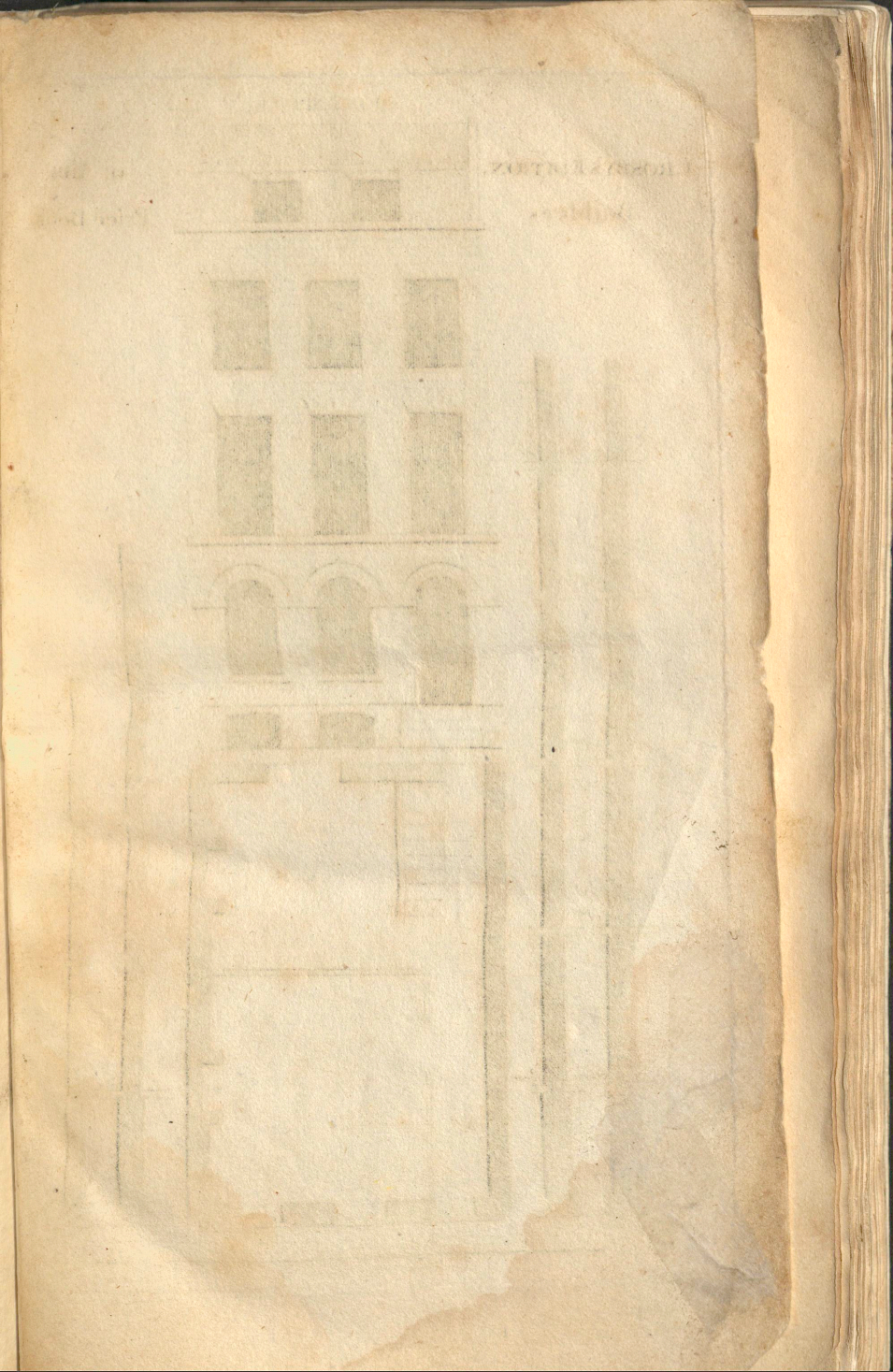
**CROSBY'S**  
**BUILDER'S**  
**PRICE BOOK**

1827







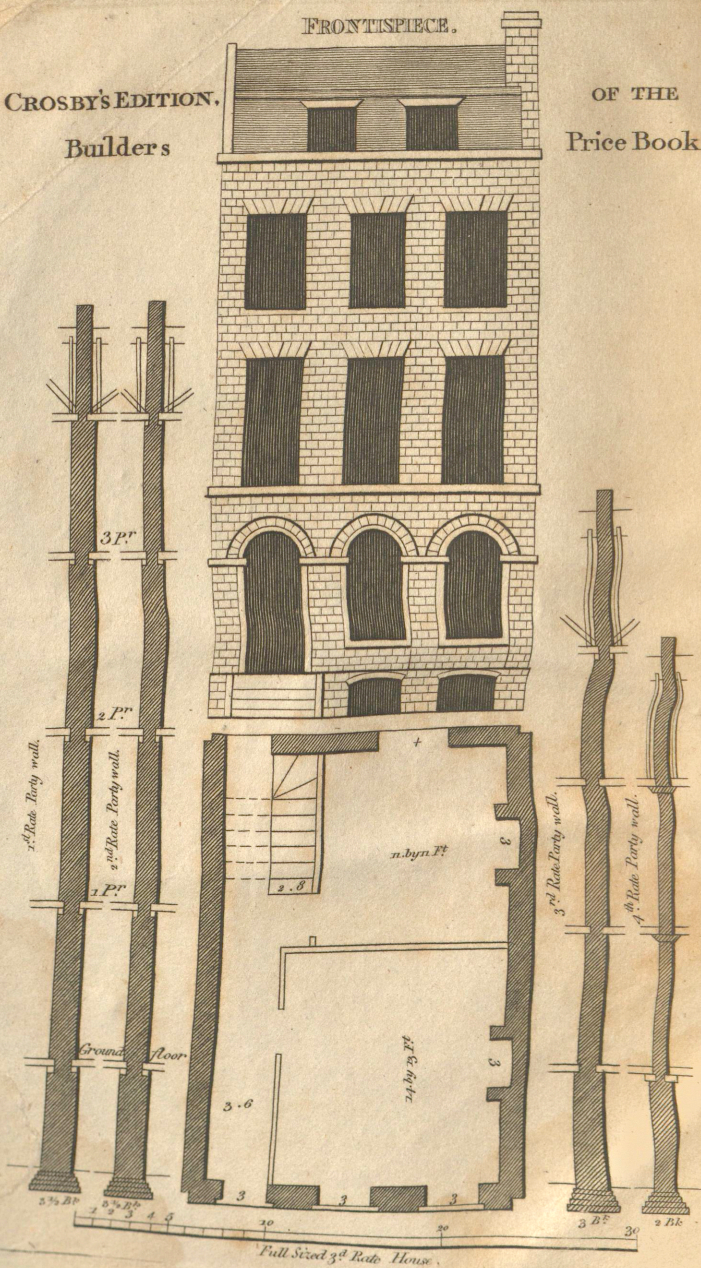


CROSBY'S EDITION,

## Builders

FRONTISPIECE.

OF THE  
Price Book.



# CROSBY'S BUILDER'S PRICE BOOK,

FOR

1827,

CONTAINING A CORRECT ACCOUNT OF ALL THE  
PRESENT PRICES ALLOWED BY

*THE MOST EMINENT SURVEYORS*

TO

BRICKLAYERS,  
CARPENTERS,  
JOINERS,  
SLATERS,  
PLUMBERS,

MASONS,  
PLASTERERS,  
PAINTERS,  
GLAZIERS,  
SMITHS,

CARVERS,  
PAVIORS,  
THATCHERS  
AND  
PAPER-HANGERS.

---

ALSO

- |  |  |
|--|--|
| I. A copious Abstract of the Building and Paving Acts and other Acts concerning Building.            | Brick-work, Plastering, Plumbing, Paving, Tiling, Slating, and Thatching.  |
| II. The last Duties on Windows, with the Names and Residences of the District Surveyors.             | V. The Value and Method of Constructing and Measuring Ovens of all Descriptions.   |
| III. Value of Materials & Workmanship, also Price of Labour only. — The Duties on Bricks, Tiles, &c. | VI. The most copious Ready Reckoner, being a complete Series of Tables for Superficial and Solid Measurements, and for ascertaining the Price per Foot, of various Scantlings. |
| IV. Tables for casting up the Price and Measurement of Timber,                                       |  |

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THE TWENTY-SIXTH EDITION.

CORRECTED THROUGHOUT  
BY AN EMINENT SURVEYOR.

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LONDON:

PRINTED FOR BALDWIN, CRADOCK, AND JOY,  
AND SOLD BY EVERY BOOKSELLER IN THE UNITED KINGDOM.

1827.

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PRICE 4s. SEWED.



## PREFACE

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THAT a book of this kind is of general utility, is universally acknowledged, and that CROSBY'S BUILDER'S NEW PRICE BOOK is generally approved, the very rapid sale of the Twenty-five former Editions is at once a proof, as well as of its reputation, and superiority in point of general information.

The Editor of the present Edition, with much diffidence, submits it to the Trade, and hopes it will not be found unworthy their protection and encouragement; at the same time he begs leave to assure them, that no time or trouble has been spared to make it as perfect as possible.

N. B. The Editor begs leave to return thanks to his numerous Friends and Correspondents, for some valuable information he has received since the last edition was published; further hints for improvements, addressed to him at the Publishers, will be thankfully received, and strictly attended to.

# CONTENTS.

An alphabetical list of the surveyors . . . . .	5	Pile driving . . . . .	64
Abstract of the building act . . . . .	7	A table of scantling measure . . . . .	65
New duty on windows . . . . .	19	Select and useful observations . . . . .	67
Abstract of the paving act . . . . .	23	Price of deals and battens . . . . .	71
Extract from the act 46 and 48 George III. relative to surveyors . . . . .	1b.	Master joiner's prices . . . . .	72
Present price of materials . . . . .	25	Slit to three inch deal . . . . .	ib.
Digging foundations . . . . .	27	Dado and wainscotting . . . . .	75
Bricklayer's work . . . . .	28	Doors . . . . .	76
Ovens . . . . .	34	Gates . . . . .	82
Drains . . . . .	35	Sashes and frames . . . . .	ib.
Bricknogging . . . . .	ib.	Sashes only . . . . .	83
Foot, ten-inch tile, brick and clinker paving . . . . .	36	Inside window shutters . . . . .	86
Pointing . . . . .	ib.	Outside do. . . . .	ib.
Rubbed and guaged work, set in putty . . . . .	37	Backs, elbows, jaumbs and soffets . . . . .	88
Do. do. and set in mortar . . . . .	ib.	Stairs, step, riser, and carriage . . . . .	89
Terras work . . . . .	ib.	String boards, newels, and brackets . . . . .	90
Galley tiles . . . . .	38	Deal and mahogany hand rails to stairs . . . . .	ib.
Pantiling . . . . .	ib.	Columns, &c. . . . .	91
Plaintiling . . . . .	ib.	Shelves . . . . .	94
Bricklayer's lime, labour, and scaffolding prices . . . . .	39	Stable racks and mangers . . . . .	95
Master bricklayer's day work prices . . . . .	41	Country work . . . . .	96
Journeyman's bricklayer's task-work prices . . . . .	43	Prices of wainscoat and mahogany . . . . .	ib.
Table of brick-work . . . . .	47	Master carpenter and joiner's day work prices . . . . .	97
Second table of do. . . . .	48	Prices of deal and wainscot . . . . .	98
The use of the table . . . . .	49	Sawyers prices . . . . .	ib.
A third table of brick work . . . . .	51	Carpenter's task-work prices . . . . .	101
A fourth do. do. . . . .	53	Mason's work . . . . .	121
Prices of timber, deals, &c. . . . .	56	Plasterer's work . . . . .	125
Carpenter's work . . . . .	58	Master plasterer's day-work prices . . . . .	128
Oak and oak plank . . . . .	5	Journeyman plasterer's task work . . . . .	129
Fir and do. do. . . . .	ib.	A table for plasterers, painters, and paviours . . . . .	132
Flooring . . . . .	60	Painter's work . . . . .	133
Roofs . . . . .	ib.	Plumber's work . . . . .	135
Furring to roofs and naked floors . . . . .	61	Glazier's work . . . . .	137
Battening to walls, partitions, and guttering . . . . .	ib.	Smith's work . . . . .	139
Water trunks and drain covering . . . . .	62	Small description of ironmongery . . . . .	ib.
Boarding for slating and weather board- ing . . . . .	63	Slater's work . . . . .	140
Centering to vaults . . . . .	ib.	Paviour's work . . . . .	ib.
Boarding flooring . . . . .	64	Copper coverings . . . . .	141
		Paper hanging . . . . .	142
		Thatching . . . . .	ib.
		Tables for superficial and solid measure- ments . . . . .	147

# ALPHABETICAL LIST OF THE SURVEYORS,

(Appointed by Act of Parliament)

WITH THEIR DIFFERENT DISTRICTS AND RESIDENCES.

Mr. Samuel Acton, Wilson-street, Finsbury-square.....	{	St. Luke, Old-street Glasshouse Yard Liberty
Mr. Beazley, Whitehall-place..	{	St. James, Clerkenwell St. John Clerkenwell
Mr. Chawner, Guildford Street.	{	St. Mary, Bermondsey, Southwk St. Mary, Rotherhithe
Mr. Cantwell, 370, Oxford-street	{	St. Clement's Dane St. Martin's-le-grand
Mr. Cockerell, Old Burlington-st ..	{	St. Mary-le-strand St. Paul, Covent Garden
Mr. Craig, St. Martin's-lane, near the Church .....	{	St. George, Hanover-square St. Mary, Lambeth
Mr. Cross, Mr. J. Tayler's, Green Dragon-yard, Whitechapel	{	St. Mary, Newington St. Mary, Whitechapel
Mr. Baker,	{	St. Luke, Chelsea
Mr. Gutch, Bridge-house, Padd.	{	St. Pancras Paddington
Mr. Donaldson, Bloomsbury-sq.	{	St. Andrew, Holborn, above the Bar
Mr. Edwards, Duncan-place, City-road .....	{	St. George the Martyr, Queen-sq. Liberty of the Rolls
Mr. Goff, Well-close-square....	{	St. Mary, Islington St. Sepulchre's without
Mr. Gibson, Grove-str. Hackney	{	Christ Church, Spitalfields Mile End, New Town
Mr. Jupp, Grove-Place, Hackney, his agent, Mr. Croft, Stepney Causeway .....	{	St. Paul, Shadwell Tower Royalty
Mr. Kinnard, 309, Holborn ....	{	Ward of Langborn Do. of Lime-street
Mr. Lereux, Canonbury-place, Islington.....	{	Do. of Tower Do. of Aldgate
Mr. Mason, corner of the New- road, Whitechapel. ....	{	Do. of Portsoken St. Ann, Limehouse
	{	Blackwall
	{	St. Catherine's Precinct
	{	St. John, Wapping
	{	Mile End, Old Town
	{	Poplar
	{	Hamlet of Ratcliff
	{	Stepney
	{	St. George, Bloomsbury
	{	St. Giles in the Fields
	{	Bethnal Green
	{	St. John, Hackney
	{	St. Mary Bow, by Stratford
	{	St. George in the East
	{	St. Botolph, Aldgate without

up to the under side of the plate under the roof or gutter, and from thence of the thickness of one brick in length, or eight inches and a half up to the under side of the blocking course, or coping on the parapet, except such parts of every such wall as shall be wholly of stone, which parts being of stone, shall be of the thickness of fourteen inches at the least below the ground floor, and of nine inches at the least above the ground floor, and except all recesses above the ground floor in the said wall, which shall be arched over in every story, so nevertheless as that the end and the back of such recess shall be respectively of the thickness of one brick in length, or eight inches and a half at the least.

**THICKNESS OF PARTY-WALLS.**—That every party-wall hereafter to be built to any first-rate building, or any addition or enlargement thereof, shall be at the foundation thereof of the thickness of three bricks and a half in length, or two feet six inches at the least, and shall from thence regularly and gradually diminish on each side of the wall four inches and a half to the top of the footing, such footing to be at least one foot high, and wholly below the upper surface of the pavement and flooring boards of the cellar story two inches at least; and every such party-wall shall from the top of such footing be of the thickness of two bricks and a half in length, or one foot nine inches and a half at least, up to the under side of the ground-floor, and from thence of the thickness of two bricks in length, or one foot five inches and a half at least up to the under side of the floor of the rooms, if any, in the roof of the highest building adjoining to such party-wall, and from thence of the thickness of one brick and a half in length, or thirteen inches at the least, to the full height of eighteen inches in every part above the square of the rafter of the highest building adjoining thereto, and one foot above the gutter.

### SECOND-RATE BUILDING.

That every warehouse, stable, and other building, not being a dwelling-house, except the 1st, 4th, 5th, 6th, and 7th rate or class of building, hereafter to be built, which shall exceed two stories, and not containing more than three clear stories above ground, exclusive of rooms, if any, in the roof thereof, or of the height of twenty-two feet, and shall not be of the height of thirty-one feet from the surface of the pavement or ground above the area, before either of the fronts thereof, to the top of the blocking course or coping on the parapet, and every dwelling-house hereafter to be built, with the offices thereunto adjoining or connected, otherwise than by a fence or fence-wall, or covered passage open on one or both sides, which when finished shall exceed the value of 350l. and shall not amount to more than 850l. and every dwelling-house which shall exceed five squares of building on the ground plan, and shall not amount to more than nine squares of building on the ground plan thereof, including internal and external walls, shall be deemed a second rate or class of building and must be built as follows viz

**THICKNESS OF EXTERNAL WALLS.**—Shall be built and remain two bricks in length, or one foot five inches and a half at the foundation thereof in thickness, and shall from thence regularly and gradually diminish on each side of the wall two inches and a quarter to the top of the footing, which shall not be less than nine inches high, and wholly below the upper surface of the pavement and flooring-boards of the cellar story two inches at the least; and every such wall shall from the top of such footing be of the thickness of one brick and a half in length, or thirteen inches at the least, up to the under side of the one pair of stairs floor, and from thence to the thickness of one brick in length, or eight inches and a half at the least, up to the under side of the blocking course or coping on the parapet, except such parts of every such wall being above the ground floor as shall be wholly of stone, which parts, so being of stone, shall be of the thickness of nine inches at the least, and except all recesses above the ground-floor in the said walls, which shall be arched over so as the arch and the back of each such recess shall respectively be of the thickness of one brick in length, or eight inches and a half at the least.

**THICKNESS OF PARTY WALLS.**—That every party-wall hereafter to be built to any second-rate building, addition thereto, or enlargement thereof, shall be three bricks and a half in length, or two feet six inches and a half in thickness at the foundation thereof, and from thence gradually diminishing on each side to the top of the footing of such wall, which footing shall be nine inches high at the least, and wholly below the upper surface of the pavement and flooring boards of the cellar story two inches at the least, and every such party-wall shall from the top of such footing be of the thickness of two bricks and a half in length, or one foot nine inches and a half at the least, up to the under side of the ground floor, and from thence of the thickness of two bricks in length, or one foot five inches and a half at the least, up to the under side of the floor of the two pair of stairs story, and from thence of the thickness of one brick and a half in length, or thirteen inches up to the full height of eighteen inches above the square of the rafter of the highest building adjoining thereto, and one foot above the gutter.

### THIRD-RATE BUILDING.

Every warehouse, stable, and other building, not being a dwelling-house, except the 1st, 5th, 6th, and 7th rates of building, hereafter to be built, which does or shall exceed one clear story, and shall not contain more than two clear stories above ground, exclusive of the rooms (if any) in the roof thereof, or which is, or shall be, of the height of more than thirteen feet, and shall not be of the height of twenty-two feet from the surface of the pavement, ground, or way, above the area before either of the fronts thereof, to the top of the blocking course or coping on the parapet thereof, and every dwelling-house hereafter to be built, with the offices

thereto belonging, adjoining, or connected, otherwise than by a fence or fence wall, or covered passage, open on one or both sides when finished, does or shall exceed the value of 150*l*. and not exceed 300*l*. and every dwelling-house which shall exceed *three squares* and a half of the building on the ground-plan, and shall not amount to more than *five squares* of building on the ground part thereof, including internal and external walls, shall be deemed the third rate or class of building, and must be built as follows, viz.

**THICKNESS OF EXTERNAL WALLS.**—That every front, side, end, or other external wall, not being a party-wall, hereafter to be built to any third-rate building, shall be two bricks in length, or one foot five inches and a half at the foundation, and from thence gradually and regularly diminishing on each side of the wall two inches and a quarter to the top of the footing, which shall not be less than six inches, and wholly below the upper surface of the pavement and flooring boards of the cellar two inches at the least, and every such wall shall from the top of such footing be of the thickness of one brick and a half in length, or thirteen inches at the least, up to the under side of the ground-floor, and from thence of the thickness of one brick in length, or eight inches and a half at the least, up to the under side of the blocking course or coping on the parapet.

**THICKNESS OF PARTY-WALLS.**—That every party-wall hereafter to be built to any third-rate building, or any addition thereto shall be built and remain at the foundation thereof, of the thickness of three bricks in length, or two feet two inches at least, and shall from thence regularly and gradually diminish on each side of the wall four inches and a half at the top of the footing, which shall be nine inches high at the least, and wholly below the upper surface of the pavement and flooring-boards of the cellar story two inches at least; and every such party-wall, shall from the top of such footing be of the thickness of two bricks in length or one foot five inches and a half at the least, up to the under side of the ground-floor, and from thence of the thickness of one brick and a half in length, or thirteen inches at the least, up to the full height of eighteen inches above the square of the rafter of the highest building adjoining thereto, and one foot above the gutter.

#### FOURTH-RATE BUILDING.

That every warehouse, stable, and other building, not being a dwelling-house, except the 1st, 5th, 6th, and 7th rate building, hereafter to be built, which shall not exceed one clear story above ground, exclusive of the rooms (if any) in the roof, or which shall not be of the height of more than thirteen feet, from the surface of the pavement or ground above the area, before either of the fronts thereof, to the top of the blocking course, or coping, on the parapet thereof: and every dwelling-house hereafter to be built, with the

offices thereto belonging, adjoining, or connected otherwise than by a fence, or fence wall, or covered passage open in one or both sides, when finished, does not, or shall not exceed the value of 150*l.* and also every dwelling-house, that shall not exceed *three squares and a half* of building on the ground-plan thereof, including internal and external walls, shall be deemed a fourth-rate or class of building, and must be built as follows, viz.

**THICKNESS OF EXTERNAL WALLS.**—Two bricks in length, or one foot five inches and one half at the least in thickness, and from thence regularly and gradually diminishing on each side of the wall two inches and a quarter to the top of the footing, such footing to be six inches high at the least, and wholly below the upper surface of the pavement and flooring-boards of the cellar story two inches at least; and every such wall shall, from the top of such footing, be of the thickness of one brick and a half in length, or thirteen inches at the least in thickness up to the under side of the ground-floor, and from thence of the thickness of one brick in length, or eight inches and a half at least, up to the under side of the blocking course, or coping on the parapet. And it is further enacted, that every house or building of the first four rates of building, hereafter to be built, not having each of them a separate and distinct side wall, on the part or parts where they are and shall be contiguous, shall have party-walls between house and house, or other building, or between so much of such house and house, as shall not respectively have such separate and distinct party-walls, and shall extend to the outer surface of the external enclosures of each of the adjoining houses or buildings.

**THICKNESS OF PARTY-WALLS.**—That every party-wall, hereafter to be built to any fourth-rate building, or any addition thereto, shall be built and remain at the foundation thereof, of the thickness of two bricks in length, or one foot five inches and a half at the least, and shall from thence regularly and gradually diminish on each side the wall two inches and a quarter, to the top of the footing, which shall be nine inches high at the least, and wholly below the upper surface of the pavement and flooring-boards of the cellar story two inches at the least; and every such party-wall shall, from the top of such footing, be of the thickness of one brick and a half in length, or thirteen inches at the least up to the under side of the ground floor, and from thence of the thickness of one brick in length, or eight inches and a half at the least up to the full height of eighteen inches above the square of the rafter of the highest building adjoining thereto, and one foot above the gutter.

Party-walls are to be between house and house, and other buildings of the four first rates or classes of building, except in such parts where each have independant walls. All party-walls above four stories high must be built as of the first rate; and party-walls to fourth-rate houses, four stories high from the foundation to the roof, must be built as of the third rate.

In valuing buildings of the first, second, third, and fourth-rates, notwithstanding decay, they shall be estimated as if the materials were sound, at the same rate that the like materials and workmanship would be worth, at the time of such valuation; but the squares shall be taken at the level of the entrance.

#### FIFTH-RATE BUILDING.

That every building, except the first and seventh-rate, or class of building, which is or shall be at the distance of four, and within eight feet from any public road, street, or causeway, and is or shall be detached from any other building, not in the same possession, full sixteen feet, and not thirty feet, or connected with any other building only by a fence or fence-wall, shall be deemed of the fifth-rate and class of building, and may be built of any dimension whatsoever.

#### SIXTH-RATE BUILDING.

That every building, except such buildings as are hereby particularly declared to be of the first-rate, or class of building, which is or shall be at the distance of eight feet from any public road, street, or causeway, and is and shall be detached from any other building, not in the same possession therewith, at least thirty feet, or connected with any other building only by a fence or fence-wall, shall be deemed of the sixth-rate or class of building, and may be built of any dimensions or materials whatsoever.

#### SEVENTH-RATE BUILDING.

That every crane-house, now built, or hereafter to be built, upon any wharf or quay; and every shamble, windmill, or water-mill, and every building without London and Westminster, and the liberties thereof; and for workshops and drying places for tanners, fell-mongers, glue-makers, calico-printers, whisters, whiting-masters, curriers, leather-dressers, buckram-stiffners, oil-cloth-painters, woolstaplers, throwsters, parchment-makers, and paper-makers, so long, and at such time as they are and may be used for some one of those purposes, and no longer, shall be deemed the seventh-rate or class of building, and may be built of any dimensions, and with any materials whatsoever; but no external part of any seventh-rate building shall, after the 24th of June, 1774, be covered with pitch, tar, or any kind of inflammable composition or materials whatsoever.

All crane-houses, or additions to, or enlargement thereof, shall be of stone, brick, slate, tile, oak, elm, fir, steel, iron, or brass.

N.B. Notwithstanding it is said that the sixth and seventh-rates, of building may be built of any dimensions and materials whatever, yet the act expressly says, in folio 1727 and 1728, that all chimnies and flues shall be built with brick or stone, or brick and stone together; and that every breast and back of every chimney, and every breast, back and with, or partition of any flue, hereafter

be built, shall be rendered or pargetted within and without, except the outside thereof, which shall be next to vacant ground, in which case the back of every chimney and flue next such vacant ground, shall be lime-whited, or in some durable manner shall be marked and distinguished, except in the fore-front, back-front, or side-front of any building, not likely to be hereafter built against; and every back of every such chimney and flue so being against such vacant ground, shall be rendered or pargetted as soon as any building shall be erected to such wall.

N. B. Builders should observe, that if they build a fifth, sixth, or seventh-rate building, with a wall on one or both sides, with an intention that the said wall or walls should hereafter become a party-wall, or party walls, they should build the said wall, or walls of the thickness agreeable to the rate the building will be of when another building is built against it; as the Act of Parliament expressly says, that no external wall shall become a party-wall, except the said wall shall be of a proper thickness; and that party-walls, hereafter to be built, and every addition that shall be made thereto, or to any party-wall which is already built or begun, shall be built agreeable to the directions herein contained concerning the party-walls of the highest rate or class of building to which such party-wall shall adjoin, when such additions are completed.

And it is also further enacted, that before any building or wall on new or old foundations, or on foundations partly new and partly old (within the limits of the building act), shall be began, the master workman, or other person, causing such wall or building to be built, shall give twenty-four hours notice thereof, in writing, to the surveyor in whose district the same shall be situate, which surveyor shall view the said building or wall, and see that the rules and regulations of the said Act are well and truly observed; and such surveyor, for his trouble therein, shall be paid by such master workman, or other person causing such wall or building to be built, such a sum of money, as a satisfaction for his trouble therein, as any two of his Majesty's justices of the peace for the city, county, or liberty, in which such building or wall is situate, shall, by any writing, under their hands, order or appoint, not exceeding,

	£.	s.	d.
For every first-rate building.....	3	10	0
And for every alteration, or addition to be made thereto..	1	15	0
For every second-rate.....	3	3	0
For every alteration or addition to be made thereto.....	1	10	0
For every third-rate.....	2	10	0
And for every alteration or addition to be made thereto..	1	5	0
For every fourth-rate.....	2	2	0
And for every alteration or addition to be made thereto..	1	1	0
For every fifth-rate .....	1	10	0
And for every alteration or addition to be made thereto..	0	15	0

	£	s.	d.
For every sixth-rate.....	1	1	0
And for every alteration or addition, to be made thereto...	0	10	6
For every seventh-rate.....	0	10	6
And for every alteration or addition, to be made thereto...	0	5	0

## CHIMNIES.

	BRICK.	
Chimney backs in party-walls.	{ Cellar story ..... $1\frac{1}{2}$ }	To twelve inches
Chimney backs not in party-walls	{ All other stories .. 1 }	above the mantle
Chimnies back to back in party-walls.	{ First-rate cellar story $1\frac{1}{2}$ }	To twelve inches
	{ All others ..... 1 }	above the mantle.
Chimney backs built against a wall.	{ First-rate cellar story 2 }	
	{ Second, third, and fourth-rate ditto — $1\frac{1}{2}$ }	To twelve inches
	{ All others ..... 1 }	above the mantle.
Partitions or withs between flues to be of brick or stone, and if of brick	{ Cellar story ..... 1 }	To twelve inches
	{ All others ..... $\frac{1}{2}$ }	above the mantle.
Chimney breasts to all chimnies	{ In every story, and to the very top .... $\frac{1}{2}$ }	1 brick thick.
	{ Cellar story ..... 1 }	
	{ All others not less .. $\frac{1}{2}$ }	

**PENALTIES.**—No building, or any addition or alteration, to any building or cutting into any party-wall, either old or new, shall be began without giving twenty-four hours notice to the surveyor in whose district the same is situated, under the penalty of three times the sum the said surveyor would be entitled to receive for his trouble in viewing the same, and twenty pounds penalty to any person who shall sue for the same.

A penalty of ten pounds on persons neglecting to cause their buildings, additions, or alterations, or cutting into a party-wall to be certified by the surveyor, and oath filed with the clerk of the peace for the county, &c. in which such building is situate; and a further penalty of ten pounds per month, until such building, &c. is certified. Penalty of fifty shillings on workmen offending against the said act.

Every building, addition, or alteration, or cutting into any party-wall, contrary to the rules and regulations contained in the said act, shall be deemed a public nuisance, and must be immediately altered, or the person or persons so offending shall be committed to the common goal, there to remain, without bail or mainprize, till the nuisance is removed.

Detached offices, or such as are connected therewith only by a fence-wall, open on both sides, shall be deemed to be of the rate of building such office would have been, if not belonging to a dwelling-house.

Materials of the division in the first, second, third, and fourth.

rates, shall be of brick or stone, or artificial stone, or stucco, or all these together, except the necessary timber, wood, lead, or iron-work.

Party-walls not being of a sufficient thickness, shall be taken down when one of the houses is rebuilt.

External walls shall not become party-walls, unless of sufficient thickness, nor shall the latter be maimed or cut into, except in particular instances. In cases of intermixed property, the owners may be compelled to join in building party-walls, and a jury shall determine the expence to be paid of each owner of the adjoining houses; and within fourteen days after judgment, and payment for tender of the money awarded, the owner of the intermixed house may pull down and enter the adjoining building, in the presence of a peace-officer, and may remove goods and furniture; and persons hindering the workmen, or damaging the work, shall forfeit ten pounds.

Builders shall be repaid a part of the expence of rebuilding party-walls, according to the verdict.

Old party-walls and party-arches, when decayed, may be rebuilt, the proprietors of the same giving three months notice.

Owners of houses of the first, second, and third class, shall give three months notice, in writing, before pulling down old party-walls; and owners of houses, having partitions of wood, may give also three months notice to owners of adjoining premises to pull down the same, and may afterwards pull down the said partitions and remove furniture, &c. as before directed.

Persons, building party-walls, or party-arches, if the adjoining building be of the same, or an higher class of building, shall pay one moiety of the expence of building a party-wall, or arch, of the thickness required for such class of building, and of the height and breadth of so much of the part-wall, or arch, as the occupier shall make use of; and, until payment of the expences, the property of the party-walls shall be vested in the first builder.

The expences of building such party-walls, or arches, to be estimated after the rate of 7l. 15s. by the rod of 272 feet, for the new brick-work, deducting therefrom after the rate of 28s. by the rod for the materials (if any) of so much of the old wall, or arch, as belonged to the adjoining ground, and *two-pence* per cubic foot for materials of so much of the old timber partitions as may have belonged to the adjoining ground or building.

N. B. Materials and labour having greatly advanced since 1774, when the act was made and passed, it is usual to allow an extra price according to the worth, by surveyors; and an extra price for the old brickwork, as also for the old sound timber.

An account to be left with the owner of the adjoining building of what he is liable to pay, within ten days after the party-wall is finished

All party-walls shall be such as required for the highest rate of the adjoining building, and they may be raised by the owner of one side! but owners of either side, making use of them, must contribute proportionably.

Party fence-walls may be raised by the owner of either side, but must not be used as a party-wall, unless of a sufficient thickness. Owners of either side may build; but owners, using such wall, must also contribute to the expence.

The first builder shall have no right of soil, on account of party-wall not being half on each ground; and if within five years, the fore or back fronts are taken down, this shall be deemed a rebuilding.

N.B. If the fore or back fronts of any building now built shall hereafter be rebuilt as low as the bressummer, or one pair of stairs floor, within five years of each other, then the party-walls shall be subject to the regulations of the said act.

Party timber partitions, or timber partitions, to be taken down when one house or one front is rebuilt, or two-third parts of one of such fronts are taken down to the bressummer, or one pair of stairs floor, and rebuilt, or when condemned, pursuant to the same acts.

Proprietors of a house or ground, to give three months notice to pull down old party walls, party-arches, party-fence wall, or quarter partition, when decayed, or of insufficient thickness, and to be left with the owner or occupier of such house, and if empty, such notice to be stuck up in and on the front door, or front of such house.

### COPY OF NOTICE.

Apprehending the party-wall, party-arch, or party fence-wall, or some part thereof (*as shall the case be*), between the house or building, or ground (*as the case shall be*) thereto adjoining, situate  
inhabited or occupied by  
and my house, or  
ground, or building (*as the case shall be*) adjoining thereto, to be  
so far out of repair as to render it necessary to repair or pull down  
and rebuild the same, or some part thereof: Take notice, that I  
intend to have the said party-wall, party-arch, or party-fence-wall  
(*as the case shall be*) surveyed, pursuant to an act of parliament,  
made in the fourteenth year of the reign of King George the Third,  
and that I have appointed

and

my surveyors, to meet at

of the clock in the  
day, (*between the hours of six in the morning and six in the afternoon*) and I do hereby require and call upon you to appoint  
two other surveyors, or able workmen, on your part, to meet them  
at the time and place aforesaid, to view the said party-wall (*as the*

of the same

of

case shall be) and to certify the state and condition thereof, and whether the same or any part thereof, ought to be repaired, or pulled down and rebuilt.

Dated this

day of

18

A. B.

The breast of the chimney is not to be supported by timber; and the timber under the hearth must be eighteen inches lower than the surface of such earth.

The hearth must be laid on brick, or stone, or on the ground; and every chimney shall have a slab, or slabs, or foot paces before it, of tile, stone, marble, or iron, at least eighteen inches broad, and one foot at least longer than the opening of such chimney when finished, except the same be a cellar, or ground floor, and bedded on the solid earth.

No timber or wood shall be laid in the brick-work of any oven, stove, copper, still, boiler, or furnace: nor within two feet of the inside of any such oven, copper, still, boiler, or furnace: nor shall any wood-work whatever be laid in the brick-work of any chimney nearer than nine inches to the opening of such chimney, or five inches to the inside of the flue of any chimney, oven, stove, copper, &c. or nine inches to the flue of any such stove, oven, copper, &c. where any such timber shall be, or be placed nearer than five feet above the mouth of the same; and all wood-work on the frame of every chimney shall be fixed by iron cramps, nails, or holdfasts, which shall not be drove more than three inches into the wall, against such chimney or flue, or nearer than four inches to the inside, under the penalty of fifty shillings, on the workmen offending against the said act; and no chimney shall be erected on timber whatever, except on planking, piling, and bridging, under the foundations, as may be necessary thereto.

External walls shall be of brick, stone, natural or artificial, lead, copper, tin, slate, tile, or iron, or some one or other of these combined: and all sash-frames and door-frames shall be set in reveals, and recessed at least four inches from the front of the building, and all story-posts and bressummers are to be but two inches in party-walls, and all corner story-posts shall be of oak or stone, and twelve inches square at least.

Flats, gutters, and roof of the first, second, third, fourth, or fifth, class, and every external part of such flat gutter shall be covered with glass, copper, lead, tin, slate, tile, or artificial stone, except the doors, door-frames, windows, and window-frames, of any erections on such roof.

N. B. Notwithstanding what is here said about the covering of houses, in 1809 an Act of Parliament was obtained to use the Patent *essera* for covering of houses, &c.

Every coping, cornice, fascia, window, dressing, bulstrade, or other external decoration or projection of the preceding rates or classes of building, and every frontispiece to any building of the

first-rate shall externally be of brick, stone, burnt clay, or artificial stone, stucco, lead, or iron, except the cornices and dressings to shop windows (the covered ways not extending beyond the original line of the houses in the same street), and such covered way shall be covered with stone, lead, copper, slate, tile, or tin; and neither the covered way, nor the cornice or dressings of any shop window, nor the roof of any portico, shall be higher than the under side of the sill of the window-frame of the one pair of stairs window to which it belongs; and no water shall be suffered to drain near to any public street, square, or court-way, from the roof of any building of the first, second, third, or fourth classes: but all water from such roofs shall be conveyed by lead, copper, tin, or iron gutters, or pipes, or by wooden trunks, or brick or stone funnels, to the drains or channel stone, or below the surface of the ground for that purpose, or to some cistern or other reservoir, or to any front of such buildings, not abutting upon any public street, place, court, or way; and every brick and stone funnel shall be in every part below the pavement, and every wooden trunk below the top of the window in the ground story.

No front windows shall extend beyond the line of the street, except projections for decorations for shop-windows and stall-boards, which, in streets or places thirty feet wide, must not project more than ten inches, and the covering eighteen inches; and in streets less than thirty feet wide, only to project five inches, and covering thirteen inches, from the upright of the building, and no wooden frontispiece to a first-rate building; the materials of such projections to be the same as those before directed to be used in external walls, but old external walls, or inclosures, may be repaired with the same materials.

No bow window or projection to be rebuilt, unless originally built or within the line of the street, court, or place.

No stack of warehouses to be above thirty-five squares, including internal and external walls; no communication to be made through party-walls, unless by stone door-cases and iron doors; and no timber to be laid in the brick-work of any wall in such stack of warehouses nearer than eighteen inches to the opening of such communication.

No building for stables to contain more than twenty-five squares of building, including internal and external walls; and there must be no communication door without having stone door-cases and iron doors.

All buildings divided into distinct tenures on the ground floor, shall be deemed separate buildings, except with respect to warehouses or stables, which may be divided under certain restrictions by stone jambs, and door cases, and iron doors.

Buildings of the fifth and sixth rates, in separate and distinct tenures, and not at the requisite distances, shall be deemed nuisances, and pulled down accordingly.

No iron, tin, copper, or other pipe or funnel for the conveyance of smoke or steam, shall be fixed next any public street, square, court, place, or way, in front of any building of the first, second, third, or fourth rate of building; nor shall there be any funnel within side nearer than fourteen inches to any timber, nor any brick funnel in the front extending beyond the line of the street, court, way, or place. Every building contrary to this regulation, shall be deemed a common nuisance, and the builder or owner shall be compelled to enter into a recognizance to demolish it, and the materials may be sold to pay the expences of removal.

N. B. The building Act wants renewing in several clauses, and none more than the third and fourth rates of building, and price for party-walls: for since the rise of labour and materials within the last fifteen years, what builder could now build any of the rate of houses for the money there inserted? and they are not to exceed 7l. 15s. per rod of 272 feet, which, on account of the great rise of labour and materials since the act passed in 1774, cannot now be built under 15l. per rod for the commonest hard stocks, and so of the rest. Also in the plaster or boarded fronts, dripping eaves, &c. when wanting repairs, should be obliged to be taken down, and rebuilt with brick or stone.

## NEW DUTIES ON WINDOWS,

*Payable from and after April the 5th, 1823.*

*Being of Consequence to both LANDLORD AND TENANT, BUILDERS AND OTHERS. The following is the NEW TABLE OF DUTIES, made payable according to the Act of 4th GEO. IV. chap. 11.*

Number of Windows according to which the Dwelling - House shall be charged.	Duties to be charged for every Dwel- ling-House.			Number of Windows according to which the Dwelling - House shall be charged.	Duties to be charged for every Dwel- ling-House.		
	In England,				In England,		
	L	S.	D.		L.	S.	D.
No. 6, the duty of .....	0	4	0	15 windows or lights ....	3	10	0
If the house with the of- fices, gardens, &c. be not worth the yearly rent of 5l. and not exceeding six win- dows .....	0	3	3	16 .....	3	18	6
7 windows or lights ....	0	10	0	17 .....	4	7	0
8 .....	0	16	6	18 .....	4	15	3
9 .....	1	1	0	19 .....	5	3	9
10 .....	1	8	0	20 .....	5	12	3
11 .....	1	16	3	21 .....	6	0	6
12 .....	2	4	9	22 .....	6	9	0
13 .....	2	13	3	23 .....	6	17	6
14 .....	3	1	9	24 .....	7	5	9
				25 .....	7	14	3
				26 .....	8	2	9
				27 .....	8	11	0
				28 .....	8	0	6
				c 2			

Number of Windows  
according to which  
the Dwelling-House  
shall be charged.

Duties to be  
charged for  
every Dwel-  
ling-House.  
In England.

Number of Windows  
according to which  
the Dwelling-House  
shall be charged.

Duties to be  
charged for  
every Dwel-  
ling-House.  
In England.

	L.	S.	D.		L.	S.	D.
29.....	9	8	0	80—84.....	24	7	6
30.....	9	16	3	85—89.....	25	10	0
31.....	10	4	9	90—94.....	26	12	3
32.....	10	13	3	95—99.....	27	14	9
33.....	11	1	6	100—109.....	29	3	6
34.....	11	10	0	110—119.....	31	13	3
35.....	11	18	3	120—129.....	33	18	3
36.....	12	6	9	130—139.....	36	3	0
37.....	12	15	0	140—149.....	38	8	0
38.....	13	3	6	150—159.....	40	12	9
39.....	13	12	0	160—169.....	42	17	9
40 to 44.....	14	8	9	170—179.....	45	2	6
45—49.....	15	16	9	180 and upwards .....	46	11	3
50—54.....	17	5	0	And for every such dwell- ing-house which shall con- tain more than 180 windows or lights, for every window or light exceeding the num- ber 180 each .....	0	1	6
55—59.....	18	13	0				
60—64.....	19	17	9				
65—69.....	21	0	3				
70—74.....	22	2	6				
75—79.....	23	5	0				

N.B. The Rules for charging windows the same as in the former act 43 Geo. III.

### RULES FOR CHARGING WINDOWS.

1. The said duties to be charged annually in respect of the windows in every dwelling-house, with the household and other offices therein enumerated.

2. All skylights, and all windows in staircases, garrets, cellars, passages, and all other parts of dwelling-houses, to what use soever applied, and whether in exterior or interior parts of such dwelling-houses, to be charged to the said duties.

3. Every window or light in any kitchen, cellar, scullery, but-tery, pantry, larder, wash-house, laundry, bakehouse, brewhouse, and lodging room, belonging to or occupied with any dwelling-house, whether the same shall be within or contiguous to, or disjoined from the body of such dwelling-house, shall be charged to the said duties.

4. The said duties to be charged yearly upon the occupier, for one whole year from April 5th, to be levied upon such occupier, or his executors, administrators, except as after provided.

5. Where any change in the occupation shall take place after the assessment, then the duties charged on the occupier shall be paid by the occupier, landlord, or owner, for the time being, or on both or all of them, according to their times of possession thereof, without any new assessment, notwithstanding such change in occupation. But where a tenant shall quit, on the termination of the lease or demise, and shall have given notice thereof to the assessor, the duty shall be discharged for the remainder of that year in case,

it shall appear to the commissioners at the end of such year, that such house shall have continued wholly unoccupied for the remainder of such year.

6. Where any dwelling-house is let in different apartments, and shall be inhabited by two or more persons, the same shall be charged as if such house was inhabited by one only; and the landlord or owner shall be deemed to be the occupier, and charged. But where the landlord shall not reside within the limits of the collector, or the same shall remain unpaid by such landlord for twenty days after the same is due, the duties may be levied on the occupiers, and such payments shall be allowed out of the next rent

7. Every house, whereof the keeping is left to the care of any person or servant, shall be subject to the like duties as if it were inhabited by the owner or a tenant; and, if such persons shall not pay rates to the church and poor, the said duties shall be paid by the owners or tenants.

8. Every distinct chamber in any of the inns of court, or of chancery, or in any college or hall, in either of the universities of Oxford or Cambridge, or any public hospital, shall be subject to the same duties as an entire house, which duties shall be paid by the occupiers; but every such chamber, which shall not contain more than seven windows, shall be charged at the rate of three shillings each.

9. All dwelling-rooms in any hall or offices whatever, belonging to any persons, or to any bodies politic or corporate, or to any company charged to the payment of any other taxes or parish rates; shall be subject to the duties, and shall be charged as dwelling-houses: and those to whom the duties shall belong, shall be charged as the occupiers.

10. When a partition or division between two or more windows or lights fixed in one frame, is or shall be of the breadth or space of twelve inches, the window or light on each side of such partition or division, shall be charged as a distinct window or light.

11. Every window extending so far as to give light into more rooms, landing, or stories, than one, shall be charged as so many separate windows as there are rooms, landings, or stories, so enlightened thereby.

12. Every window, including the frame, partitions, and divisions thereof, which by due admeasurement of the whole space on the aperture of the wall of the house or building, on the outside of such window, shall exceed in height twelve feet, or in breadth four feet nine inches, not being less than three feet six inches in height, shall be reckoned and charged as two windows, or lights, except such as shall have been made of greater dimensions prior to the 5th of April, 1785, except also the windows in shops, workshops, and warehouses, and except the windows in the public room of any house licensed to sell wine, ale, or others liquors, by retail, used

for the entertainment of guests; and the windows in farm houses (especially exempted from the duties on houses.

Where any dwelling-house shall be divided into different tenements, being distinct properties, every such tenement shall be subject to the same duties as an entire house, to be paid by the occupiers respectively; but every such tenement in England, Wales, or Berwick upon Tweed, which shall not contain more than seven windows, shall be charged 3s. per window — in Scotland 2s. per window

### EXEMPTIONS FROM THE SAID DUTIES.

Case 1. Any house belonging to His Majesty, or any of the royal family, and every public office, for which the duties heretofore payable have been paid by His Majesty, or out of the public revenue.

Case 2. Any hospital, charity school, or house provided for poor persons, except such apartments as are occupied by the officers of servants, which shall be assessed as entire dwelling-houses.

Case 3. The windows in any room licensed for the purposes of divine worship, and used for no other purpose.

Provided that every such hospital, charity school, house for poor persons, or room licensed as a chapel, shall be brought into charge by the assessor, or by the surveyor, and shall be stated on the certificate of assessment as such; and on due proof of the fact before the commissioners by the assessors, they are to discharge such hospital, charity school, house for poor persons, and room licensed as a chapel, from the said duties.

Case 4. The windows in any dairy or cheese-room belonging to and occupied with any dwelling-house, chargeable with the duties, although the same shall be part thereof, which shall be used by such occupier for the purpose of keeping butter or cheese, their own produce, for sale or private use: Provided that the windows shall be made with splines or wooden laths, or iron bars, and wholly without glass, and that the occupiers shall paint on the outer door, or on the outside of the windows thereof, or one of them, in large Roman letters, the words "Dairy," or "Cheese-room;" and provided that such dairies or cheese-rooms shall not be at any time used to dwell or sleep in, but shall be wholly kept for the purposes before mentioned: And provided also that an assessment of all such windows shall be duly made, and the fact returned in the manner directed in other cases of exemption.

### DUTIES ON ALL INHABITED HOUSES IN GREAT BRITAIN.

For every such inhabited house, which with the household and other offices, yards, and gardens, therewith occupied and charged, are or shall be worth the rent hereafter mentioned by the year, there shall be charged the yearly sums following, viz.

5l. and under 20l. rent by the year	s. d.
1	6

The yearly sum of 1s. 6d. in the pound.

S. D.

20l. and under 40l. rent by the year .....	2	3
40l. rent by the year and upwards .....	2	10

## ABSTRACT OF THE PAVING ACT.

11th George III. 3d. June, 1793.

THAT no person or persons shall, without licence or authority from the commissioners, alter, or cause to be altered, the form of the pavement, or any part thereof, of any of the said streets, lanes, squares, yards, courts, alleys, passages, or places, which under and by virtue of the said recited act and this present act, are or shall be under the management of the said commissioners, or in any way encroach thereupon, or break up the pavement of the foot or carriage ways of any of the said streets, lanes, squares, yards, courts, alleys, passages, or places, without leave of the said commissioners, except for the purpose of taking up, laying down, or repairing any water pipe or water pipes under the same, upon pain that every person so offending shall for every such offence forfeit and pay the sum of five pounds, over and above the expence of relaying and reinstating the same, according to the orders and directions of the commissioners in that behalf (and which orders and directions they are hereby fully authorised to give), the said penalty, forfeiture, and expences to be recovered by action of debt, bill, plaint, or information, in any of his Majesty's Courts of Record at Westminster, or within the city of London, in the name of the principal clerk to the commissioners for the time being, to be commenced within six calendar months next after the commission of such offence; in which action or suit no protection, essoin, or wager of law, nor more than one imparlance shall be allowed.

## EXTRACT FROM THE ACT 46 AND 48 GEO. III.

### RELATIVE TO SURVEYORS.

L. S. D.

Surveyors although not really appraisers, yet in many instances are valuers of workmanship, labour, and materials of building; and therefore are liable to the penalty of the Act of 46 Geo. III. cap. 43. the same as appraisers, and must take out a licence accordingly.

The following clauses, penalties, and exemptions, must be interesting to the perusers of this useful Price Book, to prevent informers preying on the unwary.

It is enacted in clause 5th, that no person shall exercise the calling or occupation of an appraiser, or act as such within the intent and meaning of this act, without taking out a licence, &c. and every such licence shall state the true name and place of abode of the person taking out the same, which is to be taken out YEARLY, and commence on the 6th of July, on penalty of 50l. by whoever shall appraise value, &c.

# 24 EXTRACT FROM THE SURVEYOR'S ACT.

L. S. D.

48th Geo. III. cap. 149, page 1487, the duties are appraisements on the *valuation* of any estate, or effects, real or personal, heritable or moveable: or of any interest therein, or of the annual value thereof, or of any *delapidations*: or of any *repairs* wanted, or of the *materials and labour* used, or in any *buildings*, or of any *artificer's work* whatsoever, where the amount of such appraisement or valuation shall not exceed 50l. a stamp of.....

From 50l. to 100l.....	0	2	6
100l. to 200l. ....	0	5	0
200l. to 500l. ....	0	10	0
All exceeding 500l. ....	0	15	0
	1	0	0

And every appraiser or surveyor shall write or set down in letters, words, or figures, every valuation or appraisement made by him, and the full amount thereof, and within fourteen days after the making thereof, deliver the same to his employer, on pain of forfeiting for every neglect therein, or for delivering any valuation or appraisement on the amount thereof, on any paper or parchment not duly stamped, the sum of 50l

And no person who shall employ any surveyor or appraiser to make any valuation or appraisement, shall receive or take, or pay, or make any compensation for the making any such valuation or appraisement, unless the same shall be written or set down in words or figures upon paper or parchment duly stamped, on penalty of 20l.

To use and exercise the calling or occupation of an appraiser, the licence 6s.

## EXEMPTIONS.

Appraisements on valuation made in pursuance of the order of any Court of Admiralty. Also except licensed auctioneers.

The aforesaid licence to be taken out YEARLY, by every person who shall exercise the said calling or occupation, or valuation herein before charged, with a duty for or in expectation of any *Guin, Fee, Reward*.

THE

# Builder's New Price-Book.

## THE PRICE OF BRICKLAYER'S MATERIALS:

Which accounts for the great increase of the value of buildings and expense of repairs. The prices are at the kiln, and in the brick-field, to which must be added the cartage, from 7 to 10 shillings per load, according to distance, and loaded in a barge, add wharfage, 1s.

## BRICKLAYER'S MATERIALS.

	£.	s.	d.
Foot tiles, per thousand .....	16	0	0
Do. per hundred .....	1	12	0
Sink foot tiles, 5 holes, each .....	0	0	8
Ten-inch tile, per thousand .....	12	0	0
Do. per hundred .....	1	4	0
Do. ten-inch, 5 holes, each .....	0	0	6
Nine-inch tiles, per thousand .....	9	9	0
Pan tiles, per thousand .....	5	5	0
Plain tiles, per do. ....	2	0	0
Red rubbers, per do. ....	4	10	0
Do. per hundred .....	0	9	0
Do. from the Chalfont kiln, per thousand ..	6	10	0
Do. per hundred .....	0	13	0
Do. fire bricks, per do. ....	0	15	0
Paving bricks per thousand .....	2	15	0
Do. per hundred .....	0	5	6
Kiln-burnt stocks, per thousand .....	2	11	0
Do. per hundred .....	0	5	6
Best marle stocks per thousand, cutters .....	5	15	0
Second do. per do. ....	3	10	0
Pickings, per do. ....	2	6	0
Common stocks, per do. ....	2	4	0
Malm pavours per do. ....	2	18	0
N. B. Malm pavours 52s. 2d. per thousand, to put on board ships for exportation; but they take the drawback, 5s. and 10d. per thousand, for loading and barge hire.			
Place-bricks, per thousand, of the malms .....	1	19	0
Do. common .....	1	12	0
Best Chalfont oven tiles, 12 inches square, 3 inches thick, per hundred .....	5	5	0
Do. oven tiles, 12 inches square, 3 inches thick, each .....	0	1	2
Welch do. ....	0	1	4
Do. fire lumps, do. 36 inches long .....	0	10	0
Do, 33 do. ....	0	9	0

	£.	s.	d.
Do. 30 do. ....	0	8	0
Do. 28 do. ....	0	7	0
Do. 24 do. ....	0	6	0
Do. 22 do. ....	0	5	0
Do. 20 do. ....	0	4	0
Do. 18 do. ....	0	3	6
Do. 16 do. ....	0	3	0
Do. fire-brick bricks, at per hundred .....	1	4	0
Do. per thousand .....	11	11	0
Do. for one single brick .....	0	0	4
First size chimney pots, each .....	0	4	0
Second do. do. ....	0	3	0
Third do. do. ....	0	2	6
Fourth do. do. ....	0	2	0
Chimney pots, bracket do. ....	0	8	0
Do. hovelled and armed, do. ....	0	7	6
Do. plain hovel .....	0	5	0
Do. plain arm .....	0	4	6
Do short wides .....	0	3	0
Do mitre .....	0	5	0
Do. caps .....	0	2	9
Large size do. with a fin vane .....	0	17	6
A load of bricklayer's sand, or loam single .....	0	5	6
Lime per hundred .....	0	12	6
Flame lime per hundred .....	0	16	0
Darking do. do. ....	1	3	0
Dutch clinkers per thousand .....	3	0	0
Dutch terras per bushel .....	0	5	0
Pantile laths, 12 feet long, per bundle .....	0	4	9
Do. 10 feet do. ....	0	4	6
Parker's Roman Cement, per bushel .....	0	3	0
Grellier and Co. do. ....	0	3	0
Francis and Co. do. ....	0	2	6
Oak laths per bundle .....	0	5	3
Double fir laths for tiling or slating, per bundle .....	0	4	6
Do. per load or 30 bundles .....	6	10	0
N. B. Five feet laths for plastering or tiling are 5 score to the bundle; 4 feet do. for do. are six score for do. and 3 foot are 8 score to do.; per load for single fir laths, of 30 bundles, is now			
Do. single bundles, each .....	3	5	0
N. B. Common stocks, 420 is about a ton weight, and 460 a cubic yard; the usual allowance for bricks to a rod of brick-work is 4,350; allowing waste, the usual allowance for lime for do. one hundred and a half, or thirty-seven bushels to be good; the usual allowance for sand to do. is two loads and a half; a good full brick and 4 course to 1 foot, 4,300 stocks will complete a rod of brick-work generally.	0	2	3



## BRICKLAYER'S WORK.

## LABOUR AND MATERIALS, MEASURED WORK AND PRICES.

£. s. d.

New brick-work with all place bricks laid dry, as in wells, cesspools, &c. will take 4,736 bricks to the rod of reduced brick-work, at per rod, labour included .....	13	0	0
Let it be here observed, that 272 feet of brick-work reduced to the standard of one brick and half thick is a rod of brick-work, and 306 cube is likewise a rod of brick-work reduced to the above standard.			
Do. in party-walls, will take 4,350, at per rod reduced ..	15	0	0

## EXPLANATION OF THIS PRICE OF PARTY-WALLS.

4,350 place bricks and carriage, 41s. per thousand .....	8	18	4
1½ hundred of lime, at 14s. 6d. per hundred .....	1	1	9
2½ load road drift, at 5s. Od. per load .....	0	12	6
Labour and scaffolding .....	2	5	0
	12	17	7
20 per cent. profit on do .....	2	11	6
N. B. One hundred of lime is 25 bushels.			
	15	9	1

New stock brick-work laid dry, will take 4,675 per rod reduced at 2l. 4s. per 1000, and 9s. carriage, with labour, &c. included .....	13	4	4
20 per cent. profit on do .....	2	12	10
	15	17	2

New stock brick-work to flank or party-wall will take 4,350 per rod, and will cost .....	18	5	0
New stock brick-work picked, the best for outsides, and laid in a close joint, and a good workman-like manner, 4 course to raise 11 inches and a half, will take 4,500, at per do. and jointed .....	18	15	0
And the above finished with a neat flat joint, and jointed, one penny per foot on the surface, for extra labour and mortar.			
Do. malm stock brick-work, called seconds, in a good sound workmanlike manner, and a very close joint, 4 course to rise only 11 inches and a quarter, and the wall 4 bricks thick, will take 4,650, at per rod reduced ....	26	13	0

## EXPLANATION OF THE ABOVE PRICE.

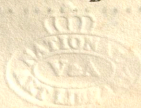
	L.	S.	D.
4,650 malm seconds, at 70s. per thousand .....	16	5	6
Carting of do. at 8s. per thousand .....	1	17	2
1½ hundred of lime, at 14s. 6d. per hundred .....	1	1	9
2 load of road drift, at 5s. 0d. per load .....	0	10	0
Workmanship .....	2	10	0
Use of utensils and scaffolding .....			
	22	4	5
20 per cent. profit on do. ....	4	9	0
	26	13	5

And the above finished with neat flat joint, and jointed one penny per foot on the surface, extra labour and mortar ..... 0 0 1  
Do. if worked fair and left for pointing, per foot ..... 0 0 0  
Garden walls one brick and a half thick, work fair both sides, close joint, as ditto, with picked stock bricks and jointed, and no allowance for the neat joint, will take 4,500 bricks per rod ..... 19 0 0  
N. B. This appears a great price for a rod of brick-work: but if the bricks are picked, and face both sides fair, it cannot be done for less.

## EXPLANATION.

	L.	S.	D.
It will take 4,500 picked grey stocks, with a close joint, to a rod, at 2l. 0s. per thousand .....	9	18	0
Cartage of ditto from field 9s. per thousand .....	2	0	6
1½ hundred of lime, at 14s. 6d. per hundred .....	1	1	9
2 load of road drift, at 5s. 6d. per load .....	0	10	0
Bricklayer's labour, per rod .....	2	10	0
Allowance per rod of use, wear and tear of utensils, and scaffolding .....			
	16	0	3
20 per cent. profit on prime cost of materials, and labour	3	4	0
	19	4	3

New fronts, faced with the best malm stocks, the inside common hard stocks, at per rod .. 24 10 0



## EXPLANATION OF THIS GREAT PRICE.

It will take 4,500 bricks to a rod of this kind of work, two-thirds malm stocks, and one-third common hard stocks.

1,500 best malms, at 5l. 0s. per thousand .....	7	10	0
3,000 hard stocks, as 42s. per do. ....	6	6	0
1 $\frac{1}{2}$ hundred of lime, at 14s. 6d. per hundred .....	1	1	9
2 $\frac{1}{2}$ load of road drift, at 5s. Od. per load .....	0	10	0
Workmanship per rod .....	2	17	6
Use of utensils and scaffolding .....			
Cartage, per 1000, at 9s. per thousand .....	2	0	6
	<hr/>		
	20	5	9
20 per cent. on do. ....	4	1	0
	<hr/>		
	24	6	9

N. B. It will take 7 malm stock bricks to complete one superficial foot of facing, and 17 bricks to every foot of reduced brick-work. This work is generally done by the foot superficial.

New fronts are worth per foot extra, super on the face ..	0	0	5
Do. only in small fronts, all materials, per foot super ..	0	1	3
Or do. at per rod reduced, and picked stocks .....	18	5	0
Or do. and malm seconds .....	24	0	0
Or do. at per do. reduced common stocks and place ...	15	0	0
Dwarf or front court walls for iron railing or small offices, one brick and a half thick, and fair n both sides, and 4 course not to rise above 11 inches and a quarter, with the best malm stocks, and the best of mortar, at per rod, reduced and filled in with common hard stocks .....	26	0	0
Add with a neat joint and jointed .....	0	0	1
Do. if left for pointing .....	0	0	0
Circular or swelled brick-work in front, mortar, labour and scaffolding per rod, from 5l. 15s. to .....	6	5	0
Labour, mortar, and scaffolding to party-walls, per rod	3	15	0
		to	
	4	15	0
Do. to walls worked fair on both sides, and jointed	4	10	0
good mortar, do. ....		to	
	5	10	0
Common grey stocks, laid well and jointed in walling	18	0	0
or internal walls, at per rod, reduced .....		to	
	18	5	0
And for any quantity less than a rod, at per foot, reduced .....	0	1	5



	L.	S.	D.
Do. $\frac{3}{4}$ stocks and $\frac{1}{4}$ place, do. ....	17	15	0
Do. $\frac{1}{2}$ stocks and $\frac{1}{2}$ place, do. ....	17	0	0
Do. $\frac{1}{4}$ stock and $\frac{3}{4}$ place, do. ....	16	5	0
Fronts best seconds, to be faced with, bedded and taken to length, and a very neat flat joint, and to rise 4 course only 11 inches and $\frac{1}{4}$ , per foot, superficial, laid in the best mortar, and finished going on extra .....	0	0	10
The workmanship, mortar, and scaffolding of do. is worth, per rod reduced, exclusive of the price allowed for face work labour .....	4	15	0
	5	5	0
Where all materials are found by the bricklayer for fronts, piers, dwarf walls, super on the face extra for best malms per foot, as follows:			
Best malms, per foot, superficial, 12d. to .....	0	0	9
Do. with tuck pointing .....	0	1	3
For best seconds, do. 6d. to .....	0	0	5
Do. with tuck pointing .....	0	0	11
For picked stock, do. 4d. to .....	0	0	3
Do. with tuck pointing .....	0	0	9
If pointed and perpend kept, per foot, superficial .....	0	0	7
And do. per foot, super extra cutting, taking bricks to a length. ....	0	0	10
Do. faced on one side with the best malm stocks, per foot extra, superficial, after reduced to the rod .....	0	0	9
Do. faced with the best seconds after do. do. ....	0	0	5
Old fronts to houses, the bricks to be allowed for the pulling down, and faced with the best picked stocks, scaffolding labour, old bricks, and mortar included, at per foot superficial, on the face, laid with a close joint and jointed ....	0	1	3
Do. and faced with the best seconds, and do. do. and will take eight or ten to a foot .....	0	1	8
Do. with the best malm stocks do. ....	0	2	0
Do. if with a neat flat jointed do. to do .....	0	0	1
Where bricks are gauged and axed off to length for perpend, per foot superficial .....	0	0	10
Per foot run external, birdmouth or splays cut .....	0	0	3
Do. inside, do. ....	0	0	3
Do. rubbed foot lace .....	0	0	6
Do. cut ramp .....	0	0	4
Do. of tile crossing 2 courses of tiles under a brick on edge .....	0	0	5
Do. and include the brick on edge, 6d. ....	0	0	8
Do. plain tile heading .....	0	0	4
Do. flaunch course .....	0	0	4
Do. sailing course .....	0	0	3
Do. of filletting .....	0	0	2

	L.	s.	d.
Do. foot tile, coping or paving.....	0	0	10
Do. ten inch tile, do. or do. ....	0	0	8
Do. cutting to moulds of inverted external arches....	0	0	4
Do. do. internal do. ....	0	0	3
Do. over circular, elliptical, or gothic external arches	0	0	3
Do. to pediments or gable ends.....	0	0	3
Cutting and dubbing out for pointing, per foot superficial.....	2d. to	0	0
Do. and pargetting chace or indent, do. ....	0	0	4
Do. and pargetting to recesses superficial .....	0	0	6
Bedding sleepers, each .....	0	0	6
Per foot, super on 9 inch wall, worked fair both sides and jointed.....	0	0	1
N. B. All curve or circular walling to be paid extra, on each face superficial, per foot, internal and external..	0	0	1
And double extra for labour, reduced.			
Observe, if the taking down and cleaning the old bricks is charged day work, and grey stocks is found by the bricklayer, the outside must be taken two-thirds of a brick, and called pickt stocks, at per foot superficial..	0	1	1
Or do. at per rod.....	19	5	0
The remaining thickness of the wall when the two-thirds facing is taken off, and the inner part is to be valued as labour and mortar only, at per rod ----	5	15	0
N. B. The carting away the rubbish to be paid for extra.			
Old brick work to houses to pull down and use up } what are good and sound, where pulled down, the	3	10	0
old bricks are worth, per rod reduced standing....	5	10	0
Brick-work to party-walls, as the act allows, per rod...	7	15	0
N. B. Materials and labour having greatly advanced in price since the act passed in 1774, it is usual to allow an extra price, according to the work, by the surveyors, usually about 13l. per rod; but on account of the late act, and advances on bricks, cannot now be less than 15l. per rod.			
N. B. Clearing and carting away rubbish charged extra.			
Mortar and labour to brick-work, scaffolding and utensils included, at per rod, reduced, specially for	4	0	0
9 inch walls.....	4	10	0
And if with very good mortar, and a neat close joint	5	5	0
and jointed .....	4	5	0
Do. all old brick-work, only faced with new bricks,	5	10	0
per do.....	5	5	0
N. B. The same if all old bricks, and if only one brick, or one brick and a half walls.	5	10	0

L. S. D.

Parapet walls, chimney shafts, &c. pulled down and using the old bricks, and made good with new stocks, the quoin and top course with scaffolding and mortar included, at per foot reduced .....	0	1	0
Do. with all new grey stocks, do.....	0	1	6
Underpinning with old bricks, 4 course, one brick thick, at per foot run.....	0	0	9
Do. with all new hard stocks, at per foot run .....	0	1	4
Beam filling with place bricks, do. 4d. stocks.....	0	0	5
Bedding and fixing sash frames and door cases, in lime and hair, according to size, from.....	1s. 6d. to	0	2 6
Venetian doors or windows, hedded in lime and hair, according to size, .....	4s. 0d. to	0	4 6
Kitchen ranges, grates, and coppers, faced with new stock, per foot reduced .....	0	1	5
Oven, 8 feet deep and 7 wide, and square breech, will hold 8 bushels of bread; and if the bread is set close 6 feet 6 inches wide at the breech, will hold 8 bushels of bread, and will cost .....	31	0	0
Do. 9 feet deep, and 7 feet 6 inches wide, and square breech, will hold 10 bushels of bread, and do. ....	38	0	0
Do. 10 feet deep, and 8 feet 6 inches wide and square breech, will hold 12 bushels of bread, and cost.....	47	0	0
And so on in proportion to 20 bushels, or reduce it for less than 8 bushels.			
Do. to measure three different ways.			
First measure from the foundation to under the floor of the oven solid, all new, at per rod reduced of 272 feet, or if the burr be cubed 306 feet cube, which is the same, deducting the ash-hole.....	16	10	0
The bottom, if paved with oven tiles or Welch tiles, per foot superficial.....	0	1	4
The whole crown, without any deduction, solid from the tile bottom, on account of the extra trouble, making the centre, and with paving bricks, per rod reduced..	32	0	0
To measure the crown by itself, which, with the best paving bricks from Child's hill or Chalfont is worth, per foot, super, all materials worked as close as possible, and cross joints struck up 6 or 8 inches .....	0	2	4
Whole 3 inches stone bottom, of Reygate, at per foot superficial.....	0	2	6
Itditto, one and a half inch ditto .....	0	1	9
Search of ditto, at per foot run.....	0	2	6
Keyed in with a Reygate key stone .....	0	9	6
And ditto, per foot super extra on the internal face, well stopped and pointed, labour only .....	0	0	4

A new red tile bottom to an oven, and a new crown, with the best paving bricks and the search with Welch lumps, or fire-stone to a 12 bushel oven, will cost at a fair price, as bricks are advanced ..... 34 0 0

The turning 4 inches of brick-work, with a close joint and old iron hoops to work in, to bind, to be paid for extra.

To make the oven keep the heat, is to bring up the sides almost straight from the haunch to near the door frame, and then give it a sudden turn or check to the mouth, as sharp as at the haunches.

If a stone bottom, or search, that must be measured by itself, and charged accordingly, but not deducted out of the brick work, at per foot running. The bottom at per foot superficial.

The second way to measure an oven is, to take the whole burr, cube it, (and 306 fecube is a rod) or deduct 1-9th, and the remainder is reduced brick-work, at per rod ..... 16 10 0

Thirdly, measure the whole burr solid, at per foot cube, and no deduction ..... 0 1 3

N. B. Any oven may be built at per bushel, according to situation, or assisted by old walls or new, from 3l. 5s. to ..... 3 15 0

Or 1s. 5d. per foot, which is 19l. per rod.

In measuring ovens, coppers, or other works of that kind take the whole dimensions in cubic feet and deduct the ash-hole only: then multiply by eight and divide by nine, which reduces it into one brick and half work.

To construct an oven to heat with coals; let the frame and door be about a foot square, like a copper door, and the bars about 18 or 20 inches long, and level with the bottom of the oven: and let the flue be about 18 inches square, for the fire to shoot slanting into the oven at the shoulder, so as the fire to fly right up the crown and centre, and spread to the haunches and all round; and let a register be fixed in the flue, and the copper to be fixed five or six inches on or over the furnace, so as not to get too hot, as warm water is always wanted in a bake-house; let a register be fixed within a little of the flue's entering the oven, and rise slanting, which, being stopped, when the oven is heated enough, goes into the funnel or chimney of the oven.

In mending bottoms or floors of ovens, the cutting out and making good day-work, at an extra price, on account of its difficulty and dangerous heat.

Oven tiles, 3 inches thick, or Welch tiles, charged each 0 1 6

L. S. D.

If the 3-inch red oven tiles, the top is rubbed, squared,  
and guaged each..... 0 1 9  
In 1785, an extraordinary well-built twelve bushel oven,  
all materials new, Welch tile bottom, with stone search  
and the crown turned over with the best paving-bricks,  
from Child's hill, measured, 38l. 6s. 6d. and at a fair  
valuation, would cost now..... 52 0 0  
N.B. The three different ways of measurement of ditto  
came within 18s.  
The height of the crown of a twelve bushel oven should  
not be less than 12 inches, nor more than 20 inches,  
nor should rise less than 3 inches higher than the top  
of the oven frame, and not exceed 4 inches.

### DRAINS.

Drain, 2 feet diameter in clear, barrellled with 9 inch  
stock brick-work all round, at per foot running..... 0 7 6  
N.B. If reduced to the standard thickness of one brick  
and half, it is worth per foot ..... 0 1 4  
Or at per rod ..... 18 5 0  
Oval drain 1 foot 6 inches wide, 2 feet high, and 9 inches  
around, per foot run ..... 0 7 0  
Run of gun drain 14 inches diameter, 4 inch sides, at .. 0 2 2  
Do. do. 12 inches diameter, 4 inch sides ..... 0 1 11  
Drain 12 inches wide, do. paved bottom and arched .... 0 1 5  
Ditto, other common drains, with bottom paved, curved  
the sides, 1 brick thick and straight, 1 foot high and  
one foot wide, arched over two four inches, all hard  
stocks, at per foot run..... 0 4 6  
Ditto, 9 inches wide, and 4 inches all round, do. .... 0 2 1  
Drain 1 foot 6 inches wide, and 2 feet high, straight sides,  
one brick thick, flat paved at bottom, and turned over  
two four inches, all hard stocks, per foot run.. .... 0 7 6  
Ditto, 14 inches, ditto..... 0 7 0  
Ditto, 9 inches wide, 9 inches high, 4 inch sides, paved  
at bottom, and arched top, per foot run . .... 0 1 11  
Ditto, 1 foot wide, 4 inch sides, arched, per foot run.... 0 2 1  
All digging, centering and filling up, to be charged extra  
generally day work.

### BRICKNOGGING.

PER YARD SUPERFICIAL.

Bricknogging, with all place bricks, 4 inches ..... 0 3 6  
Do. edgeways, do..... 0 2 8  
Do. do. with hard stocks, do. .... 0 3 2  
Do. with hard stocks, 4 inches do..... 0 4 3  
N.B. The wood quartering not deducted.

## PAVING.

## PER YARD SUPERFICIAL.

	L.	S.	D.
Paving with new foot tiles, in mortar .....	0	6	0
Paving with new 10-inch tiles, in mortar do.....	0	5	6
Do. with new paving bricks, flat in mortar .....	0	4	6
Do. do. on edge, do. do. ....	0	8	0
Do. do. flat and dry in sand do .....	0	3	10
Do. do. do. on edge do. ....	0	7	4
Do. best new hard stocks, called malm pavers, flat in mortar do. ....	0	4	10
Do. do. on edge, do. ....	0	6	6
Do. do. paved flat and dry, in sand do. ....	0	4	3
Do. do. do. on edge, do. do. ....	0	5	9
Do. with new common hard stocks, flat in mortar do....	0	3	6
Do. do. on edge, do. ....	0	5	0
Do. do. dry, in sand, and flat, do. ....	0	3	0
Do. do. on edge, do. ....	0	4	4
N.B. Three hundred and fifty-five stocks flat will pave a square, or 100 superficial feet.			
Paving with Dutch clinkers on edge, sand and labour, at per yard superficial.....	0	11	0
Do. laid herring bone .....	0	13	0
Observe, 36 stocks paved flat, 48 on edge, 144 clinkers, 32 paving bricks, flat, and 82 paving bricks on edge, 9 foot tiles, and 13 ten inch tiles, will pave a yard.			
Levelling the ground for paving is charged day work.			

## POINTING.

	L.	S.	D.
Tuck and patt, with a neat joint on new work, with the perpendes regarded, mortar, scaffolding, and labour included, per foot superficial.....	0	0	7
Do. random, but neat joint, do. ....	0	0	6
Do. to old fronts, labour and scaffolding included, do. and well stopped and raked.....	0	0	7
Do. to do. and coloured down, the arches cleaned and neatly drawn do. ....	0	0	8
N.B. All cutting out and making good, 2d. per foot superficial extra, or by the day, and charge stuff and time.			
Flat joint pointing to back front, or flank walls, scaffolding, labour, and mortar included, per foot superficial .....	0	0	2 to 0 0 3½
Flat pointing coloured and drawn, per foot superficial to old fronts.....	0	0	4
Do. to garden walls, do. ....	0	0	3½
Flat pointing in terras .....	0	0	6
Pointing rough arches, per foot flat .....	0	0	4

# RUBBED AND GAUGED WORK, SET IN PUTTY.

L. S. D.

Straight, or camber arches, or bevel schemes, straight on face, neatly cut square, and set well in putty, per foot superficial four inches sofeet .....	0	3	6
Do if sofeet more than four inches.....	0	3	6
Do. if swelled or circular surfaces .....	0	4	6
Circular, semi-circular, or Gothic do. do .....	0	3	6
Do. if with sofeet more than four inches.....	0	3	8
Do. if swelled or circular surface .....	0	4	5
Elliptical, Venetian, or OG Gothic, do. do. ....	0	4	0
Do. if with sofeet more than four inches.....	0	4	3
Do. if swelled or circular surface .....	0	5	6
Bodies of niches, semi-circular, do.....	0	4	6
Crowns or heads of do. ....	0	10	6
Poll block to do. carved with shells, &c. ....	0	16	0
Elliptical bodies of niches, per foot super .....	0	5	6
Crown or heads to do. do. ....	0	11	0
Poll block carved to do.....	0	17	6
Astragal cut to spring from, per foot ran, do.....	0	2	3

N.B. It will take 10 or 12 bricks to cut the face of a foot of work in the body of a circular nich on a semi-circular plan, and 12 to 14 to face a foot in the head or crown.

It will take 12 to 14 bricks to cut the face of a foot of work in the body of an elliptical nich, on a semi-elliptical plan, and 16 to 18 to cut do. to the head or crown.

It takes 10 bricks to cut one foot of gauged arch superficial

Taking out old gauged arches cleaned and re-set, labour putty, and mortar, per foot..... 0 1 4

Tuscan cornices, with mouldings straight, set in putty, per foot superficial .....

Rubbed and gauged brick-work to face stoves, ovens, coppers, &c. or impost cut square and set well, to piers for gates, per foot super. .... 0 2 2

N.B. The rubbed and gauged work is not deducted in admeasurement, nor price, out of the brick-work per rod, although paid for extra.

# RENDERING AND WORKING IN TERRAS.

Grey stock brick-work laid 9 inches in terras, per foot superficial, and cross joint struck in 4 inches .....	0	2	1
Do. laid 4-inches in terras, do. through .....	0	1	3½
Foot tiles bedded and set in terras, on edge, per foot do .....	0	1	3
Ten-inch do. do. do .....	0	1	3

	L. S. D.		
Plain tiles do. and rendered over with terras, do. suer	0	1	2
Two courses of plain tiles do. set do .....	0	1	6
Rendering only with terras, do.....	0	0	4
Flat pointing in terras, do .....	0	0	6

## GALLEY TILES.

Common white set in fine stuff, per foot superficial ...	0	1	2
Blue and white do. do. do.....	0	1	6
Do, or brown and white real Dutch, do. ....	0	1	8
Old do. taken down, cleaned, squared, and reset exclusive of preparing the chimney .....	0	0	7
Galley tiles guaged and set in terras, exclusive of the tiles, per foot super .....	0	1	6

## PANTILING.

New pantiling, bedded and pointed inside and out, with lime and hair, per square .....	2	8	0
Do. pointed inside only, do. ....	2	3	0
Do. pointed outside only, do .....	1l. 15s. to	2	2 0
Do. laid dry with hips and ridges, laid in lime and hair ditto .....	1	18	0
Hips, ridges with ridge tiles and valleys, per foot run ....	0	0	6
Pantile heading, laid in lime and hair, per foot run ....	0	0	4
Old pantiling ripped, new lathed, and re-tiled, with old tiles, bedded and pointed outside, in lime hair, per square .....	1	0	10
If any new tiles are used, to make a charge of them separate, 2½d. each.			
English black glazed pantiling, and pointed inside and out, with lime and hair, per square.....	3	2	0
Do. and pointed outside only, do. ....	2	15	0
Do. and laid dry, hips and ridges, in lime and hair, do ..	2	12	0
N.B. One hundred and seventy pantiles, 1 bundle of pantile laths, and 120 of 6d. nails, will complete a square of pantiling.			
The guage for pantiling is ten and a half, or eleven inches, according to the pitch of the roof, which should not rise less than one third.			

## PLAIN-TILING.

New plain tiling on double fir laths, per square 2 17 0 to 3	0	0	0
Do with oak laths, and 4d. rose nails, do. ....	3	3	0
Plain tile, heading, or creasing, laid in lime and hair, per foot run .....	0	0	4
Old plain tiling ripped, new lathed and retiled .....	1	3	0
The new tiles used to be charged extra.			
Filling, per foot run .....	0	0	2

	L.	S.	D.
Plastering the gable, or verge, per foot run .....	0	0	3
Hyp hooks and nails, each .....	0	1	0
T. nails for hyps and ridges, each .....	0	0	2

The quantity of mortar usually required to every square of plain tiling is two bushels of lime and two bushels of sand, well mixed.

Plain-tile laths are those of 5 feet long, 5 score to the bundle; and those only 4 feet long, 6 score; those of 3 feet, 8 score; and of double fir or oak, the same.

The lathing of the roof is different, according to its pitch or rise in height, at a 6 inch,  $6\frac{1}{2}$  inch, 7 inch, and 8 inch gauge, with a counter lath between the rafters, if a foot or more distance from each other.

N.B. When it is a kirb roof, the gauge of the lathing of the kirb part is  $7\frac{1}{2}$  inch or 8 inch gauge, the other part according to its pitch or sharpness, 6 inches,  $6\frac{1}{2}$  or 7 inch gauge.

The quantity of nails required to nail on one bundle of 5 feet laths, are 500 of four penny, and to a bundle 4 feet long 600, and 6 score to the hundred.

A square of tiling is ten feet every way, or 100 superficial feet, and requires from 650 to 760 plain tiles, and a bundle of laths, according to the gauge, and there should be half a peck of tile pins at least to every square.

All nails used by bricklayers to be charged 5 score to the hundred by name, that is (two-penny nails, two-pence per hundred; three-penny nails, three pence per hundred; four-penny, four pence per hundred; and six-penny, six pence per hundred, &c. &c.

It takes 735 tiles at a 7 inch gauge, 703 at an 8 inch gauge, and 665 at a nine inch gauge, to complete a square of tiling

### MORTAR, LABOUR, AND SCAFFOLDING ONLY, TO BRICKWORK AND TILING.

Mortar, labour, and scaffolding to buildings one brick or one and a half brick, worked fair and scaffolding all round, with good stocks and close joint, per rod and Thames sand .....	4l. 15s. to	5 10 0
Do. to common brickwork and party walls, use rubbish instead of sand, per rod .....	3l. 15s. to	4 15 0
Circular or swelled brickwork in front, mortar labour and scaffolding .....		5 15 6
Or add per foot, super on face .....	$1\frac{1}{2}$ d. to	0 0 2
Mortar, labour and scaffolding to common brickwork, worked fair and jointed, and good rubbish mortar, per rod .....	4l. 5s. to	4 17 6

Fronts faced with best seconds, bedded and taken to lengths, a neat flat joint and jointed, and to rise 4 course, only $11\frac{1}{4}$ inches per foot superficial; laid in good Thames sand, mortar finished going on.....	0	0	3 $\frac{1}{2}$
Do. brickwork per rod reduced .....	5l. to	5	10 0
Do. old brickwork faced with new stocks, seconds, or pickings, per rod .....	5l. to	5	10 0
Do. all old bricks and use rubbish to mortar instead of Thames sand .....	4l. to	4	17 6

## DRAINS,

## PER FOOT RUN.

Drain 2 ft. diameter in clear barrelled, and 9 inch brickwork all round.....	0	2	3
Do. 18 inch drane, do. do.....	0	1	9
Do. 14 inch drain, do. do.....	0	1	6
Do. 12 inch drain, do. do.....	0	1	4
Do. 9 inch drain, do. do. 4 inches round do.....	0	0	7
Do. 18 inch do. 9 inch sides and arch, 2 four inches flat brick paved bottom, do.....	0	1	7
Do. 14 inch, do.....	0	1	5
Do. 12 inch do. do. ....	0	1	3
Do. 9 inch, do. do. ....	0	1	1
All digging, centering, and filling up extra.			

## BRICKNOGGING.

## PER YARD SUPERFICIAL.

Bricknogg 4 inches, labour and mortar .....	0	1	6
Do. on edge, do.....	0	1	4
N.B. The wood quartering not deducted.			

## PAVING.

## PER YARD SUPERFICIAL.

Labour and mortar to foot tile paving .....	0	1	6
Do. with 10 inch tiles, do.....	0	1	7
Do. with paving bricks flat, do.....	0	1	6
Do. with do. on edge, do. ....	0	2	2
Do. with hard stocks, flat, do. ....	0	1	4
Do. with do. on edge, do. ....	0	1	8
Labour and terras to 9 inch brickwork, per foot superficial	0	1	3
Do. to do. 4 inches, do. ....	0	0	9

## PANTILING.

## PER SQUARE.

Labour, lime, and hair, pointing inside.....	0	7	0
Do. do. and pointed outside, do. ....	0	5	0
Do. laths, and nails, to pantiling dry .....	0	12	0

PLAIN-TILING,

PER SQUARE.

L. S. D.

Labour, mortar, laths, and nails, and rip tiling and clean the tiles and re-tile.....	1	3	0
Labour, mortar, laths, and nails only .....	1	0	0
Chimney moulds, labour, mortar, and fixing large size and second .....	2s	0	3 0
Do. next sizes, each.....	1s 9d	0	2 6
Old do. taken down and refixed, do. ....	0	2	1
Cutting and pargetting to recesses per foot superficial..	0	0	6
Bedding sleepers 6d. 9d. and .....	0	1	0
according to length and bigness.			

MASTER BRICKLAYER'S DAY-WORK PRICES.

Bricklayer's, from Lord Mayor's Day to Lady Day....	0	5	9
Labourer, do.....	0	3	6
Bricklayer from Lady Day to Lord Mayor's Day....	0	6	0
Labourer, do.....	0	3	8
Bricklayer an hour .....	0	0	7 $\frac{1}{2}$
Labourer, do.....	0	0	4 $\frac{1}{2}$
Bricklayer employed in fire work per day..	0	6	0 to 0 7 0
Lime sent in by the hundred, and so charged, slacked and screened.....	0	19	0
A bag, or basket of lime .....	0	7	2
A load of sand .....	0	7	0
A double load of do.....	0	14	0
A basket of do.....	0	0	4
A load of mortar is 30 hods .....	0	17	6
A hod of do.....	0	0	7
Mortar of stone lime per do.....	0	0	9
N.B. Two thirds barrow stone lime, and one third good drift sand, well beaten and little water, is little inferior to terras.			
A load of lime and hair, or pargetting 30 hods .....	1	5	0
A hod of do. ....	0	0	10
A hod of pointing mortar, white .....	0	1	6
Do. of blue .....	0	1	4
A bushel of real Dutch terras .....	0	7	0
Do. of Parker's cement.....	0	4	6
Windsor loam, per bushel .....	0	2	6
Ditto bricks, or fire bricks, per hundred, or of Chalfont kiln.....	1	2	0
Welch fire bricks, do.....	1	18	0
Per single do. ....	0	0	6
Best malm stocks, do. per hundred .....	0	14	0
Seconds picked, do. ....	0	9	6

	L.	s.	D.
Malm pavours, do. ....	0	8	0
Best picked grey stocks, do. ....	0	6	8
Hard common grey do. do. ....	0	6	3
Place bricks, do. ....	0	4	8
Profit allowed by the trade in the city on common grey stocks, per thousand, set down and so charged.....	0	8	0
And on all other bricks in proportion, according to the prime cost, where they are charged by the thousand, set down at the work.			
Paving bricks, per hundred .....	0	7	0
Do. one single brick .....	0	0	1
Red kiln burnt stocks, per hundred .....	0	6	6
Windsor bricks, do. ....	0	11	0
Red or malm rubbers, do .....	0	13	6
Red rubbers from Chalfont kiln, per do .....	0	15	6
Dutch clinkers, do. ....	0	10	0
Pan-tiles, do .....	0	14	0
Plain tiles, do .....	0	6	8
Do. single tile .....	0	0	1
Pan-tiles, each single, under one hundred .....	0	0	2 $\frac{1}{2}$
Ridge tiles, each .....	0	0	3
Glazed pan-tiles, do. ....	0	0	4
Oven tiles, three inches thick, do. ....	0	1	6
Welch oven tiles, do. ....	0	1	8
Foot paving tiles, do. ....	0	0	6
Do. per hundred .....	2	0	0
Do. sink tiles, with five holes each .....	0	1	6
Ten-inch paving tiles, each .....	0	0	4
Do. per hundred .....	1	10	0
Do. sink tiles, five holes each .....	0	0	10
Blue and white galley tiles, do. ....	0	0	6
White do. do. ....	0	0	4
Fir laths, per bundle, single .....	0	3	0
Do. and nails .....	0	3	8
Double fir laths, per bundle .....	0	5	6
Do. and nails .....	0	6	6
Oak laths, per bundle .....	0	6	6
Do. with nails .....	0	8	0
Twelve foot pan-tile laths, per bundle .....	0	6	0
Do. with nails .....	0	6	9
Ten foot pan tile laths, per bundle .....	0	6	0
Do. with nails .....	0	6	9
Hyp, hooks, and nails, each .....	0	1	0
T. nails for hyps and ridges, each .....	0	0	2
Tile pins, per bushel .....	0	5	0
Hair, per bushel .....	0	1	8
Basket of tile heads .....	0	0	9
A new white basket .....	0	1	10

	£.	s.	D.
A common unpeeled do. ....	0	1	4
Large size chimney mould, with tin vane on top, and setting .....	1	5	0
Do. double bracket chimney mould and do. ....	0	18	0
Do. bracket, or hovelled and armed, do. and do. ....	0	15	6
Do. plain hovelled do. and do. ....	0	13	0
First size large mould, and plain, and do. ....	0	7	6
Second do. do. and do. ....	0	6	0
Third do. do. and do. ....	0	5	0
Fourth do. and do. ....	0	4	0
Three inch drain or water-pipes, in two feet lengths, at per foot .....	0	1	10
Six inch do. do. ....	0	2	9
Nine inch do. do. ....	0	4	6
Sugar moulds are sometimes used, each .....	0	2	3
Rubbish carted away, per load double .....	0	5	6
A basket of do. taken away .....	0	0	3
Clay per load, for vaults, delivered .....	0	10	0
Claying vaults, 6 to 8 inches thick, per yard .....	0	3	0
Soil, emptying and carrying away, per ton .....	0	5	6
N. B. The cubic feet in a bog hole divided by 18, is the tons of soil, the quotient being tons. They always charge a ton for any small quantity over that is taken away, and the men have liquor allowed, or one shilling each in lieu thereof.			

### LABOUR ONLY.

	£.	s.	D.
Building new brick-work, according to its thickness, goodness, and value of the workmanship, per rod ..	1	18	6
Do. and to find all scaffolding, do. ....	2	5	0
Do. if a front only, and scaffolding do. ....	2	2	0
Do. if a front only, and scaffolding do. ....	2	10	6
Do. if a front only, and scaffolding do. ....	2	5	0
Do. if a front only, and scaffolding do. ....	2	15	0
Old fronts taken down, bricks cleaned, rebuilt, and faced with stocks, and left for pointing, per rod .....	3	10	0
Brick-work laid dry, per rod, as in cespools, &c. ....	1	11	6
The clearing away to be paid for extra.			
Brick-work of all old bricks, pulling down and clearing, day work .....	2	16	0
New brick fronts, straight and worked close, with seconds fair and left for pointing, super .....	0	0	0 $\frac{1}{2}$
Do. and faced with best seconds, bedded and taken to length, and a very neat flat joint, 4 courses to rise only 11 $\frac{1}{2}$ inches, and laid in the same mortar and jointed, and finished as going on, per foot super ....	0	0	8
Or a neat flat joint, and jointed, super on the face extra	0	0	1

New brick-work, with a circular or elliptical bow, neat close joints for pointing, per foot super, on the face, extra.....	0	0	1
Parapets or chimney shafts taken down and rebuilt, using the old bricks, and made good with new stock, per foot reduced .....	0	0	3
Tuck and patt pointing and stopping to new fronts, and the perpend regarded, per foot superficial.....	0	0	3½
N. B. Fronts, or walls on a circular, elliptical, or swelling bow plan, are worth more than straight work of the same sort, per rod, to.....	0	12	0
	1	0	0
Tuck and patt random joints, pointing super .....	0	0	3
And do. to old fronts, and scaffolding do.....	0	0	3½
And do. do. and coloured, and do. do. ....	0	0	3¾
All cutting out and making good by the day, or per foot extra .....	0	0	1
Flat joint, pointing and scaffolding to fronts, or flank wall per foot, raking out included.....	0	0	2
If coloured, add per foot ¼d. or ½d. according to the workmanship.			
Do. to garden walls per foot .....	0	0	1½
New pantiling, and pointed outside, lime and hair, per square .....	0	5	6
Old pantiling ripped, new lathed, and retiled, do.....	0	6	6
Hyps, ridges, and valleys, per foot run.....	0	0	1
Do. inside, do. pointed .....	0	7	0
Do. laid dry, hyps and ridges, in mortar, do. ....	0	4	0
Plain tiling, per square .....	0	7	0
Old plain tiling ripped, lathed, and retiled, do.....	0	9	0
Run of plain tile creasing, per foot, 2 course .....	0	0	1½
Do. per foot, run externals, splays or birdmouth, do....	0	0	1½
Do. inside, do.....	0	0	1
Do. cut ramp or flanch course .....	0	0	2
Do. two course plain tile creasing, under brick on edge, and include the brick edge .....	0	0	2
Do. heading .....	0	0	1
Do. sailing course .....	0	0	1
Do. filletting .....	0	0	0½
Do. cutting to moulds of external inverted arches .....	0	0	1½
Do. internal do.....	0	0	1
Do. cutting and making good over cemis, elliptic, or gothic arches.....	0	0	1
Do. to pediments or gables .....	0	0	1
Per foot super cut and dub out for pointing.....	0	0	1½
Do. cut and parget chase or indent.....	0	0	1½
Bedding sleepers according to length, breadth, and thickness, 2d. to.....	0	0	6
Per foot run foot tile coping .....	0	0	2

	L.	s.	D.
Do. ten-inch do. do. ....	0	0	2
Brick cart load of all bats extra, more than usual, when bricks are sent in per load, labour in laying.....	0	2	6
Bricknogging flat, or 4 inches at per yard.....	0	0	9
Do. on edge .....	0	0	7
N. B. The quarters measured in.			
Paving with Dutch clinkers, per yard .....	0	0	11
Do. laid herring bone do. ....	0	1	0
Do. stock-brick paving, flat and dry, do. in sand .....	0	0	5
Do. if paved in mortar, do. ....	0	0	7
Do. brick on edge, paving dry, do. ....	0	0	8
Do. laid in mortar, do. ....	0	0	10
Paving bricks, flat in mortar.....	0	0	7
Do. on edge in do.....	0	0	11
Gauged, straight, or camber arches, set in putty, red or malms cut well and square, per foot superficial.....	0	1	2
Do. circular, semi-circular, or gothic, do.....	0	1	4
Do. Venetian elliptical, or OG gothic, do. ....	0	1	6
Do. scheems, or circular arch in a circular, swelled or elliptical, bow front do.....	0	2	0
Do. circular or scheems in a straight front, solid, nine- inch sofeets, and cut up nine inches do. ....	0	1	8
Do. rough arches, axed off, sofeets, or cornice, and set close in mortar for tucked pointing, per foot super....	0	0	3
Rubbed and gauged brick-work to face stoves, ovens, coppers, sides of ranges, grate piers, &c. set in putty, per foot superficial .....	0	0	10
Do. and laid in mortar, do.....	0	0	8
Old arches taken out, cleaned, and re-set, at per foot superficial .....	0	0	9
Rubbed and gauged bodies of niches, semi-circular, and set in putty, do.....	0	2	4
Do. heads or crowns to do. do.....	0	4	6
Do. poll block to do. carved or fluted, or shell.....	0	12	0
Do. elliptical bodies, gauged and set in putty, do. do ..	0	3	3
Do. heads or crowns to do. do. ....	0	6	0
Do. poll block to do. a shell, or carved, or fluted, do...	0	18	6
Do. astragal to spring from, per foot run to do. ....	0	1	0
Rubbed returns, foot lace, impost, or facio, laid in mor- tar, per foot run, 4 course.....	0	0	3
Do. only axed off, and rough, for inside .....	0	0	1
Rubbed and gauged Tuscan cornice, straight mouldings set in putty, per foot superficial .....	0	2	0
Do. dentil, do. do. do.....	0	2	6
Do. Tuscan, cut and set in mortar, do.....	0	1	6
Rough cornices, 5 course for composition, or stucco, to project one foot, per foot run.....	0	0	6

	L.	S.	D.
Rough groins, axed off, and rubbed, fair, red, or grey, do.	0	0	5
Labour turning over groins, per rod	2	10	0
Welch cornice, rough, 3 course projecting and straight per foot run	0	0	2½
Do. block cornice, do. 4 course do. and both set in mortar do. one under and two over block	0	0	6
Do. circular or elliptical arch, and set close in grout or fine mortar, per foot superficial	0	1	6
Do. common arches axed do. do.	0	0	4
Two feet in clear barrelled drain, 9 inches brick-work all round, at per foot run	0	1	2
Drain, 18 inches diameter, barrelled, turned over and under 2 four inches, per foot run	0	0	11
Do. 18 inches wide, 1 brick sides, 6 course high, 4 inch arch, and paved at bottom, do.	0	0	9
Do. 14 inch do. do. 4 course high, and arched do.	0	0	7
Do. 12 inch do. do. 3 course, do. do. do.	0	0	6
Do. 9 inch do. do. 2 do. do. do. do.	0	0	5
Do. 6 inch do. 4 do. do. do.	0	0	3½
Sash and door frames, bedded and pointed	0	1	0
Large do. circular heads, or venetian	1s. 6d. to	0	2 0
Galley tiles set in fine stuff, per foot	0	0	3½
Do. gauged and set interras, do.	0	0	5
9 inch brick work laid interras or cement, cross joints 4 inches, per feet super	0	0	3½
Foot or ten inch tiles, or one four inch brick, do.	0	0	2½
Two course of plain tiles, and rendered over, do.	0	0	4½
Flat joint pointing in terras, do.	0	0	3

## A FIRST TABLE,

## OF THE VALUE OF BRICK-WORK.

*Reduced to one brick and a half thick, from 2s. 10d. per rod, to 20l. per rod; and from half a farthing a foot, to one shilling and sixpence per foot.*

Per Ft.	Per. Rod.	Per. Ft.	Per. Rod.	Per. Ft.	Per. Rod.
0d. $\frac{1}{8}$ $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	0 2 10 0 5 8 0 11 4 0 17 0	6d. $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	6 16 0 7 1 8 7 7 4 7 13 0	12d. $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	13 12 0 13 17 8 14 3 4 14 9 0
1d. $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	1 2 8 1 8 4 1 14 0 1 19 8	7d. $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	7 18 8 8 4 4 8 10 0 8 15 8	13d. $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	14 14 8 15 0 4 15 6 0 15 11 8
2d. $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	2 5 4 2 11 0 2 16 8 3 2 4	8d. $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	9 1 4 9 7 0 9 12 8 9 18 4	14d. $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	15 17 4 16 3 0 16 8 8 16 14 4
3d. $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	3 8 0 3 13 8 3 19 4 4 5 0	9d. $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	10 4 0 10 9 8 10 15 4 11 1 0	15d. $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	17 0 0 17 5 8 17 11 4 17 17 0
4d. $\frac{1}{2}$ $\frac{3}{4}$	4 10 8 4 16 4 5 2 0 5 7 8	10d. $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	11 6 8 11 12 4 11 18 0 12 3 8	16d. $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	18 2 8 18 8 4 18 14 0 18 19 8
5d. $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	5 13 4 5 19 0 6 4 8 6 10 4	11d. $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	12 9 4 12 15 0 13 0 8 13 6 4	17d. $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	19 5 4 19 11 0 19 16 8 20 2 4

*And 1s. 6d. per foot is 20l. 8s. per rod.*

## A SECOND TABLE OF BRICK-WORK.

The number of rods contained on the superficies or face of the wall or building from half a brick to four bricks and a half in thickness, and reduced to the standard measure of one brick and a half thick, being already cast up, there is nothing to do but to multiply the length and height, and the table will give the true contents in rods, quarters, and feet of the wall.

The wall reduced to one brick and a half.

	½ brick.		1 brick.		1½ brick.		2 bricks.		2½ bricks.		3 bricks.		3½ bricks.		4 bricks.		4½ bricks.	
	rd.	qr. ft.	rd.	qr. ft.	rd.	qr. ft.	rd.	qr. ft.	rd.	qr. ft.	rd.	qr. ft.	rd.	qr. ft.	rd.	qr. ft.	rd.	qr. ft.
1 qr.	0	0 22	0	0 45	0	1 00	0	1 22	0	1 45	0	2 00	0	2 22	0	2 45	0	3 00
2 qr.	0	0 45	0	1 22	0	2 00	0	2 45	0	3 22	1	0 00	1	0 45	1	1 22	1	2 00
3 qr.	0	1 00	0	2 00	0	3 00	1	0 00	1	1 00	1	2 00	1	3 00	2	0 00	2	1 00
1	0	1 22	1	2 45	1	4 00	1	5 22	1	6 45	2	0 00	2	1 22	2	2 45	3	0 00
2	0	2 45	1	4 00	2	5 22	2	6 45	3	8 00	3	1 22	4	2 45	5	4 00	6	0 00
3	1	0 00	2	1 22	3	2 45	4	4 00	5	5 22	6	6 45	7	8 00	8	9 22	9	0 00
4	1	1 22	2	2 45	3	4 00	4	5 22	5	6 45	6	8 00	7	9 22	8	10 45	9	12 00
5	1	2 45	3	4 00	4	5 22	5	6 45	6	8 00	7	9 22	8	10 45	9	12 00	10	13 22
6	2	0 00	4	1 22	5	2 45	6	4 00	7	5 22	8	6 45	9	8 00	10	9 22	11	10 45
7	2	1 22	4	2 45	5	4 00	6	5 22	7	6 45	8	8 00	9	9 22	10	10 45	11	12 00
8	2	2 45	5	4 00	6	5 22	7	6 45	8	8 00	9	9 22	10	10 45	11	12 00	12	13 22
9	3	0 00	6	1 22	7	2 45	8	4 00	9	5 22	10	6 45	11	8 00	12	9 22	13	10 45
10	3	1 22	6	2 45	7	4 00	8	5 22	9	6 45	10	8 00	11	9 22	12	10 45	13	12 00
11	3	2 45	7	4 00	8	5 22	9	6 45	10	8 00	11	9 22	12	10 45	13	12 00	14	13 22
12	4	0 00	8	1 22	9	2 45	10	4 00	11	5 22	12	6 45	13	8 00	14	9 22	15	10 45
13	4	1 22	8	2 45	9	4 00	10	5 22	11	6 45	12	8 00	13	9 22	14	10 45	15	12 00
14	4	2 45	9	4 00	10	5 22	11	6 45	12	8 00	13	9 22	14	10 45	15	12 00	16	13 22
15	5	0 00	10	1 22	11	2 45	12	4 00	13	5 22	14	6 45	15	8 00	16	9 22	17	10 45
16	5	1 22	10	2 45	11	4 00	12	5 22	13	6 45	14	8 00	15	9 22	16	10 45	17	12 00
17	5	2 45	11	4 00	12	5 22	13	6 45	14	8 00	15	9 22	16	10 45	17	12 00	18	13 22
18	6	0 00	12	1 22	13	2 45	14	4 00	15	5 22	16	6 45	17	8 00	18	9 22	19	10 45
19	6	1 22	12	2 45	13	4 00	14	5 22	15	6 45	16	8 00	17	9 22	18	10 45	19	12 00
20	6	2 45	13	4 00	14	5 22	15	6 45	16	8 00	17	9 22	18	10 45	19	12 00	20	13 22
21	7	0 00	14	1 22	15	2 45	16	4 00	17	5 22	18	6 45	19	8 00	20	9 22	21	10 45

The No. of rods contained upon the surface of the wall.

It is needless to make more thickness, as by adding those of any thickness, which you may want together, and the rods, quarters, and feet, following, you have the contents wanted, ready cast up.

## EXPLANATION

## OF THE FOREGOING TABLE.

At the head of the table you have the thickness of any wall in bricks and half bricks, from any thickness from half a brick to four bricks and a half thick, under their several columns; and in the first towards the left hand, you have the number of rods that any wall contains, upon the superficies thereof, from one quarter of a rod to 21 rods; and in the several columns you have the rods, quarters, and feet, reduced to the standard thickness of one brick and a half, as will best appear by the two or three following examples.

## THE USE OF THE TABLE.

## EXAMPLE I.

If a wall, measured on the superficies thereof, be found to contain 9 rods, and the wall be two bricks and a half thick, how many rods of reduced brick-work of one brick and a half does that wall contain?

Look for 9 rods, the measure of the face or flat of the wall in the first column towards the left hand, and find two bricks and a half (the thickness of the wall wanted) at the head or top of the table, and against 9 in the first column, and under two bricks and a half at the head, you will find 15, and so many (15) rods does the wall contain.

And so by the following table you will find, that if a wall does contain upon the flat or face 13 rods, superficial measure, if that wall be

$\frac{1}{2}$	a brick thick	4	1	22	Contents reduced.
1		8	2	44	
$1\frac{1}{2}$		13	0	0	
2	bricks thick, it will contain, being	17	1	22	
$2\frac{1}{2}$	reduced to one brick and a half	21	2	45	
3	thick .....	26	0	0	
$3\frac{1}{2}$		30	1	22	
4		34	2	45	
$4\frac{1}{2}$		39	0	0	

And so on to any thickness or superficial contents.

## EXAMPLE II.

If a wall be four bricks thick, and contains 17 rods upon the face or flat, how many reduced rods of one and a half brick-work does it contain?

Look for 17 in the first column on the left hand, and 4 bricks thick at the top or head of the table, and against the 17 you will find 45 rods, 1 quarter, and 22 feet, and so much reduced work does the wall contain.

## EXAMPLE III.

If the superficial contents on the surface of a wall contain 13 rods and three quarters, and be 4 bricks and a half thick, how many rods reduced work, one brick and a half thick, does it contain?

	Rods.	Qr.	Ft.
Look at the table as before, and you will find 13 rods upon the flat, and 4 bricks and a half thick, is .....	39	0	0
And three quarters of a rod, and four bricks and a half thick, is.....	2	1	0
So 13 $\frac{3}{4}$ rods on the flat or surface reduced, is .....	41	1	0

## EXAMPLE IV.

If the superficial contents on the surface of a wall contain 8 rods and be nine bricks and a half thick, how much does that wall contain of reduced brick-work to the standard of one brick and a half thick?

Now, in this case, you cannot find nine bricks and a half at the top or head of the table, so you may take twice four bricks and one brick and a half, or twice four bricks and a half, and the half brick; or 3 times 3 bricks and half a brick; or twice 3 bricks, and then 3 bricks and a half; or, add others to make the thickness nine bricks and a half thick, and their contents, added together, is the contents reduced,

	Rods.	Qr.	Ft.
For instance: 8 rods flat by 4 brick is .....	21	1	12
Do. add again for do. twice.....	21	1	22
One brick and a half add also to do. ....	8	0	0
So that 8 rods, superficial on the face, at nine bricks and a half thick, will be reduced .....	50	2	34

These examples, I presume, will be fully sufficient to shew the great use of these tables, where every length and thickness may be very easily ascertained, carefully adding together where it is not exactly set down.

## A THIRD TABLE OF BRICK-WORK.

## THICKNESS.

Superficial or Sq. Feet.	$\frac{1}{2}$ Brick.	1 Brick.	$1\frac{1}{2}$ Brick.	2 Bricks.	$2\frac{1}{2}$ Bricks.
1	5	11	16	22	27
2	11	22	33	44	55
3	16	33	49	66	82
4	22	44	66	88	110
5	27	55	82	110	137
6	33	66	99	132	165
7	38	77	115	154	193
8	44	88	132	176	220
9	49	99	148	198	248
10	55	110	165	220	273
11	60	121	181	242	303
12	66	132	198	264	330
13	71	143	215	286	358
14	77	154	231	308	386
15	82	165	248	330	413
16	88	176	264	352	441
17	93	187	281	375	468
18	99	198	297	397	496
19	104	209	314	419	523
20	110	223	330	441	551
30	165	330	496	661	826
40	220	448	661	882	1102
50	274	558	827	1102	1476
60	329	668	992	1323	1754
70	384	779	1158	1544	2029
80	439	889	1323	1764	2307
90	495	999	1488	1985	2583
100	549	1109	1654	2205	2859
200	1098	2219	3309	4411	5718
300	1647	3329	4962	6626	8577
400	2196	3438	6616	8822	11436
500	2746	5548	8270	11028	14295
1000	15492	10096	16541	22057	28590
2000	10984	20193	33082	44114	57181
3000	26476	30290	49623	66171	85771
4000	21968	40387	66164	88228	114362
5000	57461	50484	82705	110285	145953
10000	54922	100968	165411	220570	285906

## EXPLANATION

OF THE THIRD TABLE OF BRICK-WORK.

This table shews how many bricks are sufficient to build a piece of brick-work, containing any number of feet or thickness, from one foot to 10,000 feet, and from half a brick thick to two bricks and a half, and consequently, by addition only, to any thickness or number of feet required, and at the rate of 4,500 bricks to a rod, at the statute thickness of one brick and a half, waste included.

EXAMPLE I.

How many bricks will build a wall 75 feet in length, 8 feet in height, and one brick and a half thick? First, multiply 75, the length, by 8, the height, and the produce is 600 feet, the superficial contents of the surface of the wall.

Seek in the first column on the left hand of the table for 500 feet, and for 100 feet, which, added together, is 600 feet, against which, at one brick and a half at the top, you will find for 500, 8,270, and for 100, 1,654, which, being added together, is 9,924, the number of bricks required at one brick and a half thick.

EXAMPLE II.

How many bricks are required to build a piece of brick-work 100 feet long and 15 feet high, and two bricks and a half thick? Multiply as before, and 1,500 feet is the superficial contents; but as the exact number of feet cannot be found at once in the table, you must take it at twice. Thus:

Seek in the left hand column for 1000 feet, and opposite, under two bricks and a half, is 28,590; then look back in the column for 500, the other number wanted, and opposite, under two bricks and a half, 14,295, which add to the first number; so that 1,500 feet of brick-work, two bricks and a half thick, takes 42,885 bricks.

## A FOURTH TABLE OF BRICK-WORK.

Square Feet Super.	$\frac{1}{2}$ Brick.			1 Brick.			$1\frac{1}{2}$ Brick.			2 Bricks.			:		
	R.	Q.	Ft. In.	R.	Q.	Ft. In.	R.	Q.	Ft. In.	R.	Q.	Ft. In.	R.	Q.	Ft. In.
1	0	0	0 4	0	0	0 8	0	0	1 0	0	0	1 4	0	0	1 8
2	0	0	0 8	0	0	1 4	0	0	2 0	0	0	2 8	0	0	3 4
3	0	0	1 0	0	0	2 0	0	0	3 0	0	0	4 0	0	0	5 0
4	0	0	1 4	0	0	2 8	0	0	4 0	0	0	5 4	0	0	6 8
5	0	0	1 8	0	0	3 4	0	0	5 0	0	0	6 8	0	0	8 4
6	0	0	2 0	0	0	4 0	0	0	6 0	0	0	8 0	0	0	10 0
7	0	0	2 4	0	0	4 8	0	0	7 0	0	0	9 4	0	0	11 8
8	0	0	2 8	0	0	5 4	0	0	8 0	0	0	10 8	0	0	13 4
9	0	0	3 0	0	0	6 0	0	0	9 0	0	0	12 0	0	0	15 0
10	0	0	3 4	0	0	6 8	0	0	10 0	0	0	13 4	0	0	16 8
11	0	0	3 8	0	0	7 4	0	0	11 0	0	0	14 8	0	0	18 4
12	0	0	4 0	0	0	8 0	0	0	12 0	0	0	16 0	0	0	20 0
13	0	0	4 4	0	0	8 8	0	0	13 0	0	0	17 4	0	0	21 8
14	0	0	4 8	0	0	9 4	0	0	14 0	0	0	18 8	0	0	23 4
15	0	0	5 0	0	0	10 0	0	0	15 0	0	0	20 0	0	0	25 0
16	0	0	5 4	0	0	10 8	0	0	16 0	0	0	21 4	0	0	26 8
17	0	0	5 8	0	0	11 4	0	0	17 0	0	0	22 8	0	0	28 4
18	0	0	6 0	0	0	12 0	0	0	18 0	0	0	24 0	0	0	30 0
19	0	0	6 4	0	0	12 8	0	0	19 0	0	0	25 4	0	0	31 8
20	0	0	6 8	0	0	13 4	0	0	20 0	0	0	26 8	0	0	33 4
21	0	0	7 0	0	0	14 0	0	0	21 0	0	0	28 0	0	0	35 0
22	0	0	7 4	0	0	14 8	0	0	22 0	0	0	29 4	0	0	36 8
23	0	0	7 8	0	0	15 4	0	0	23 0	0	0	30 8	0	0	38 4
24	0	0	8 0	0	0	16 0	0	0	24 0	0	0	32 0	0	0	40 0
25	0	0	8 4	0	0	16 8	0	0	25 0	0	0	33 4	0	0	41 8
26	0	0	8 8	0	0	17 4	0	0	26 0	0	0	34 8	0	0	43 4
27	0	0	9 0	0	0	18 0	0	0	27 0	0	0	36 0	0	0	45 0
28	0	0	9 4	0	0	18 8	0	0	28 0	0	0	37 4	0	0	46 8
29	0	0	9 8	0	0	19 4	0	0	29 0	0	0	38 8	0	0	48 4
30	0	0	10 0	0	0	20 0	0	0	30 0	0	0	40 0	0	0	50 0
31	0	0	10 4	0	0	20 8	0	0	31 0	0	0	41 4	0	0	51 8
32	0	0	10 8	0	0	21 4	0	0	32 0	0	0	42 8	0	0	53 4
33	0	0	11 0	0	0	22 0	0	0	33 0	0	0	44 0	0	0	55 0
34	0	0	11 4	0	0	22 8	0	0	34 0	0	0	45 4	0	0	56 8
35	0	0	11 8	0	0	23 4	0	0	35 0	0	0	46 8	0	0	58 4
36	0	0	12 0	0	0	24 0	0	0	36 0	0	0	48 0	0	0	60 0
37	0	0	12 4	0	0	24 8	0	0	37 0	0	0	49 4	0	0	61 8

## A FOURTH TABLE OF BRICK-WORK.

(Continued).

Square Feet Super.	$\frac{1}{2}$ Brick. R. Q. Ft. In.			1 Brick. R. Q. Ft. In.			$1\frac{1}{2}$ Brick. R. Q. Ft. In.			2 Bricks R. Q. Ft. In.			$2\frac{1}{2}$ Bricks. R. Q. Ft. In.							
38	0	0	12	8	0	0	25	4	0	0	38	0	0	0	63	4				
39	0	0	13	0	0	0	26	0	0	0	39	0	0	0	65	0				
40	0	0	13	4	0	0	26	8	0	0	40	0	0	0	66	8				
41	0	0	13	8	0	0	27	4	0	0	41	0	0	0	1	0	4			
42	0	0	14	0	0	0	28	0	0	0	42	0	0	0	1	2	0			
43	0	0	14	4	0	0	28	8	0	0	43	0	0	0	1	3	8			
44	0	0	14	8	0	0	29	4	0	0	44	0	0	0	1	5	4			
45	0	0	15	0	0	0	30	0	0	0	45	0	0	0	1	7	0			
46	0	0	15	4	0	0	30	8	0	0	46	0	0	0	1	8	8			
47	0	0	15	8	0	0	31	4	0	0	47	0	0	0	1	10	4			
48	0	0	16	0	0	0	32	0	0	0	48	0	0	0	1	12	0			
49	0	0	16	4	0	0	32	8	0	0	49	0	0	0	1	13	8			
50	0	0	16	8	0	0	33	4	0	0	50	0	0	0	1	15	4			
51	0	0	17	0	0	0	34	0	0	0	51	0	0	1	1	17	0			
60	0	0	20	0	0	0	40	0	0	0	60	0	0	1	12	0	1	32	0	
70	0	0	23	4	0	0	46	8	0	1	2	0	0	1	25	4	0	1	48	8
80	0	0	26	8	0	0	53	4	0	1	12	0	0	1	38	8	0	1	65	4
90	0	0	30	0	0	0	60	0	0	1	22	0	0	1	52	0	0	2	14	0
100	0	0	33	4	0	0	66	8	0	1	32	0	0	1	65	4	0	2	40	8
200	0	0	66	8	0	1	65	4	0	2	64	0	0	3	62	8	1	0	61	4
300	0	1	32	0	0	2	64	0	1	0	28	0	1	1	60	0	1	3	24	0
400	0	1	65	4	0	3	62	8	1	1	60	0	1	3	57	4	2	1	54	8
500	0	2	30	8	1	0	61	4	1	3	24	0	2	1	54	8	3	0	17	4
600	0	2	64	0	1	1	60	0	2	0	56	0	2	3	52	0	3	3	48	0
700	0	3	29	4	1	2	58	8	2	2	20	0	3	1	49	4	4	1	10	8
800	0	3	62	8	1	3	57	4	2	3	52	0	3	3	46	8	4	3	41	4
900	1	0	28	0	2	0	56	0	3	1	16	0	4	1	44	0	5	2	4	0
1000	1	0	61	4	2	1	54	8	3	2	48	0	4	3	41	4	6	0	34	8
2000	2	1	54	8	4	3	41	4	7	1	28	0	9	3	14	8	12	1	1	4
3000	3	2	48	0	7	1	28	0	11	0	8	0	14	2	56	0	18	1	36	0
4000	4	3	41	4	9	3	14	8	14	2	56	0	19	2	29	4	24	2	2	8
5000	6	0	34	8	12	1	1	4	18	1	36	0	24	2	2	8	30	2	37	4
6000	7	1	28	0	14	2	56	0	22	0	16	0	29	1	44	0	36	3	4	0
7000	8	2	21	4	17	0	42	8	25	2	64	0	34	1	17	4	42	3	38	8
8000	9	3	14	8	19	2	29	4	29	1	44	0	39	0	58	8	49	0	5	4
9000	11	0	8	0	22	0	16	0	33	0	24	0	44	0	32	0	55	0	40	0
10000	12	1	1	4	24	2	2	8	36	3	4	0	49	0	5	4	61	1	6	8

## EXPLANATION AND USE.

*Of the foregoing Table of Brick-work reduced.*

Which by inspection shews how many rods, quarters of rods, feet, and inches, are contained in any number of superficial feet, from 1 foot to 10,000 feet, and so on ad infinitum; and from half a brick thick to two bricks and a half, and by addition to any thickness.

This table consists of two pages, and over every column in each page is wrote the contents of  $\frac{1}{2}$  brick, 1 brick,  $1\frac{1}{2}$  brick, 2 bricks, and  $2\frac{1}{2}$  bricks; and in the first column of each page is the number of superficial feet, and opposite, under the head of thickness, are the rods, quarters, feet, and inches sought, reduced to the standard thickness of  $1\frac{1}{2}$  brick.

N.B. A rod is 272 feet 3 inches, but in measuring the odd  $\frac{1}{2}$ , or 3 inches, is not noticed, and divide by 272 only. Half a rod is 136 feet, and a quarter 68 feet.

If your wall be thicker than  $2\frac{1}{2}$  bricks, for instance, 3 bricks, then take twice  $1\frac{1}{2}$  brick; for  $3\frac{1}{2}$  bricks thick, take the product of 2 bricks and  $1\frac{1}{2}$  brick; and if 4 bricks thick, take twice two bricks thick, and so in like manner for any thickness required.

## EXAMPLE I.

Suppose a wall of brick-work, 50 feet long, and 8 feet high, and  $2\frac{1}{2}$  bricks thick, what is the contents thereof reduced? First, multiply the length 50 feet by the height 8 feet, and product is 400 feet.

Secondly, seek in the first column for 400 feet, and against it, in the sixth column, under the head of  $2\frac{1}{2}$  bricks, you will find 2, 1, 54, 8, which is 2 rods, 1 quarter, 54 feet, and 8 inches, the true reduced contents required.

## EXAMPLE II.

What is the contents of a piece of brick work, whose superficial contents is 397 feet, and a brick thick?

Now as the contents 397 feet, cannot be found at one time, you must in this and the like case, take the number at twice or thrice, or more, if required, till you have the whole number wanted, thus:

R. Qr. Ft. In.

300 feet at a brick is.....0 1 32 0

90 feet do. ....0 0 30 0

7 feet do. ....0 0 2 4

0 1 64 4

This is one quarter of a rod 64 feet, 4 inches reduced.

## EXAMPLE III.

What is the reduced contents of a piece of brick-work, whose superficial measure is 22,720 feet, and 2 bricks thick?

10,000 feet, at 2 bricks, is.....49 0 5 4

10,000 do. do. ....49 0 5 4

2,000 do. do. ....9 3 14 8

700 do. do. ....3 1 49 4

20 do. do. ....0 0 26 8

111 1 33 4

Thus, 22,720 superficial feet of a two brick wall, is 111 rods 1 quarter, 33 feet, 4 inches.

## EXAMPLE IV.

How many rod is contained in a piece of brick-work, whose superficial contents are 1000 feet, at five bricks thick

Seek the 1000 feet in the first column, and as there is not such a thickness as five bricks, take  $2\frac{1}{2}$  bricks twice, which will be found in the last column opposite the 1000 feet, and add two together, this is the contents sought.

	Rds.	Qr.	Ft.	In.
1000 feet at $2\frac{1}{2}$ bricks thick is .....	6	0	34	8
Do. do. ....	6	0	34	8
	12	1	1	4

Thus, 1000 feet, 5 bricks thick, is 12 rods, 1 quarter, 1 foot, and 4 inches

It has been remarked, that the author has not yet noticed smokey chimneys:—the causes are so various, that no general rule or method can be laid down as a certain cure; for as the causes are various, so are the means employed.

## PRICES OF TIMBER, DEALS, &amp;c.

## AT THE TIMBER YARD.

	L.	s.	d.
Oak, square measure, per load, if large.....	8l	to 12	0 0
Smaller sized do.....	6l.	to 8	0 0
30 feet cube of do. one ton			
Elm, do. per load ....6l. Os.....	Large and good	7	0 0
Do. smaller .....		5	0 0
Inch elm board, per 100 foot, now .....	17s. 6d.	to 1	5 0
60 feet cube of elm is one ton.			
Ash, do. per load, round measure .....	9l. Os.	to 10	10 0
45 feet cube of ash is one ton.			
Walnut tree, do. ....	8l.	to 10	0 0
Riga and Dantzic timber, per load .....	6	15	0
50 feet cube of fir timber is one ton.			
Memel do. per load .....	6	10	0
Large die square Brewick, do. and Swedish timber, } per load .....	6	5	0
Small do. Brewick or Dram .....	5	15	0
Per load .....	6	0	0
American pine timber, per load .....	4l. Os.	to 5	15 0
14 feet long clapboard wainscot logs, each.....	5l. 10s.	to 6	10 0
7 feet do. do. ....	3l. 5s.	to 4	0 0
20 feet 3 inch Petersburg or Dantzic plank 10½ to 11 inches wide, per hundred .....	78	0	0
Plank, 18 feet 3 inches Petersburg, per do .....	70	0	0
16 feet of do. per hundred .....	63	0	0
14 feet of do. per hundred .....	55	0	0

12 feet 3 inch, dry seasoned yellow deals, very best, per hundred	L.s.	D.
12 feet 3 inch yellow deals, do. seconds	50	0 0
12 feet 2½ inch do. do. best dry	43	0 0
12 feet 3 inch white do. do.	47	0 0
10 feet 3 inch yellow, dry seasoned, very best do.	41	0 0
10 feet 3 inch yellow, do. seconds	35	0 0
10 feet 2½ inch yellow do.	30l. to 34	0 0
14 feet 3 inch yellow, best dry deals	59	0 0
14 feet 2 inch yellow, best dry seasoned deals, do.	47	0 0
14 feet 2½ inch yellow, dry best battens do.	40	0 0
12 feet do. do. do.	34	0 0
10 feet do. do. do.	to 28	0 0
Half deals, 3 inch yellow do. 8 feet	25	0 0
Deal ends, 3 feet long, 3 inches thick, do.	10	10 0
6 feet long pale boards, per hundred	4l. 4s. to 4	15 0
5 feet do. do.	3l. 10s. to 4	0 0
Old oak posts 7 feet long, each	0	3 9
Do. 6½ do.	0	3 6
Do. 6 do.	0	3 2
Do. spurs, 3 and 4 feet long do.	to 0	1 6
¾ do. old sheathing, per foot run 1½ d. to 2½ d. or per 100 feet run	0	12 0
1½ inch base do. plank per foot run, 9 to 10 inches wide	0	0 3½
If do. wider, at per foot superficial.	6d. to 0	0 9
Old quartering 3 by 2½, or 3 run per foot	0	0 2
Per cwt. of old spiked straitened	0	16 0
New oak cleft, 6 foot pales, 80 to the hundred	1	10 0
Do. do. do. 5 feet do. 100 to the 100	1	10 0
Do. do. do. 4½ feet do. 120 to the 100	1	10 0
Do. do. 9 feet posts each	0	8 6
Do. do. 9 feet aris rails, each	0	2 9
Do. do. 1½ inch plank for base, new per foot run	0	1 2
¾ inch right Dutch wainscot, per foot superficial	0	0 9
1 inch do. do.	0	1 0
1½ inch do. do.	0	1 3
1½ inch do. do.	0	1 6
2 inch do. do.	0	2 0
1 inch mahogany do.	1s. 6d. to 0	2 3
1½ inch do. do.	2s. 2d. to 0	3 0
Pannel board of do. for coach makers, do.	0	1 2
Lathwood, per fathom	10	10 0
Single fir laths, per load	3	5 0
Do. per single bundle	0	2 3
Double fire laths per load	6	15 0
Do. per single bundle	0	4 6
N.B. Mahogany varies so often, no real price can be fixed; but for waste, &c. add one fifth on the prime cost.		

## MASTER CARPENTER'S PRICES

## TABLE.

The different prices of timber being thus given in the table annexed, the calculations which follow of Carpenter's work are for labour and nails in performing the different kinds of work, and when that is measured and added to the timber, it will make the bill of expence complete.

	P. load 3l.		P. load 6l.		P. load 7l.		P. load 8l.		P. load 9l.		P. load 10l.		P. load 11l.		P. load 12l.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
Fir without labour.....	3	1	3	7	4	2	4	8	5	3	5	9	6	4	6	10
Do. in bond plates, &c.....	3	6	4	0	4	7	5	1	5	8	6	2	6	9	7	3
Do. framed.....	3	11	4	5	5	0	5	6	6	1	6	7	7	2	7	8
Do. wrought and framed.....	4	4	4	10	5	5	11	6	6	6	7	0	7	7	8	1
Do. do. and rebated.....	4	9	5	3	5	10	6	4	6	11	7	5	8	0	8	6
Do. do. and beaded.....	5	1	5	7	6	2	6	8	7	3	7	9	8	4	8	10

The price to be charged per foot cube, for fir scantling, when at any of the above prices, from 8l. to 15l. per load, prime cost, including sawing, carting, waste, and profit, these being the general prices for 1813, of the different kinds of timber; and if bought at any of the intermediate prices between the pounds, it is very easy to calculate the proper price to be charged, by adding or diminishing accordingly, as timber is in such an unsettled state at present.

N.B. Five feet per load is proper allowance for waste.

AT PER FOOT CUBE, IN COMMON SCANTLINGS.			L.	s.	D.
Old oak, perfect and sound .....	0	4	0		
New rough oak, without labour ..	0	8	6		
Do. and labour, in bond lintels, plates, &c.....	0	9	1		
Do. and labour, and framed in floors, partitions, &c. ..	0	9	7		
Do wrought, and do .....	0	10	2		
Do. and framed, wrought, &c. rebated .....	0	10	8		
Do. dry and planed all round in trusses, to girders ....	0	11	0		
Do. framed, rebated, and beaded, as in door cases, &c....	0	11	6		
Wrought oak posts in streets, headed and set do. ....	0	8	6		
Bark per load (or stack).....	8l.	8s.	to 10	10	0

OAK PLANK.

AT PER FOOT SUPERFICIAL.

	L.	S.	D.
Inch rough .....	0	0	9 $\frac{1}{2}$
Do. with nails and labour, do. ....	0	0	11
Edges shot, do. ....	0	0	11 $\frac{1}{2}$
Do. and framed .....	0	1	1 $\frac{1}{2}$
Do. wrought one side and framed .....	0	1	2 $\frac{1}{2}$
One and half inch, rough .....	0	1	1
Do. and nails and labour, do. ....	0	1	2 $\frac{1}{2}$
Edges shot, do. ....	0	1	3 $\frac{1}{2}$
Framed do. do. ....	0	1	5
Do. and wrought one side and framed .....	0	1	7
Rough two inch .....	0	1	5
Do. nails and labour .....	0	1	6 $\frac{1}{2}$
Edges shot and do. ....	0	1	7 $\frac{1}{2}$
Framed and do. ....	0	1	9
Do. and wrought one side and framed .....	0	1	11
Rough two and half inch .....	0	1	9
Do. nails and labour do. ....	0	1	10 $\frac{1}{2}$
Edges shot and do. ....	0	2	0
Framed and do. ....	0	2	2
Do. and wrought one side and framed .....	0	2	4
Rough three inch .....	0	2	3
Do. and nails and labour, do. ....	0	2	5
Edges shot and do. ....	0	2	7
Framed and do. ....	0	2	9
Do. and wrought one side and framed .....	0	2	11
Rough three and a half inch .....	0	2	10
Do. and nails and labour do. ....	0	3	0
Edges shot and do. ....	0	3	2
Framed and do. ....	0	3	4
Do. and wrought one side and framed .....	0	3	6
Four inch elm plank, planed both sides, and framed for kitchen dresser, per foot. ....	0	3	4
Four and a half inch do. for do. ....	0	3	9

N.B. If the plank runs above twelve feet long, and ten inches wide, add 6d. per foot more. Old, without labor, is half the value of new.

FIR,

AT PER FOOT CUBE.

	All Mate. rials.
Do. fir, no labour .....	4 1
Do. in bond plates, &c. ....	4 6
Do. framed .....	4 11
Do. wrought and framed .....	5 5
Do. do. do. and rebated .....	5 10
Do. do. do. do. and beaded .....	6 2

## BAULKS OR UPHERS, EACH.

£. s. d.

	£.	s.	d.
Thirty-eight to forty long, each.....	0	13	6
Thirty-six feet long, do. ....	0	12	0
Twenty-eight do. do. ....	0	10	0
Twenty-two do. do. ....	0	7	6

## NAKED FLOORING

LABOUR AND NAILS, PER SQUARE OF 100 FEET SUPER.

Framed single floors .....	0	8	0
Do. with trimmers to chimneys and stairs.....	0	9	6
Do. framed, with two girders, twelve inches deep.....	0	15	6
Framed with girders, binding, bridging, and ceiling joice 1 4 0			
Bridging upon naked flooring only .....	0	5	0
Bridging and with ceiling joist only .....	0	10	0
Ceiling floors, do. ....	0	7	0
Old ground joists, bedded.....	0	5	0
Trussing girders, with oak and labour, per foot run ....	0	1	4
Groove cut to do. 4 by 4, per foot run .....	0	0	6
Ground joice on sleepers, 5s. 6d. to.....	0	6	6
Girders sawn, reversed, and bolted, per foot run .....	0	0	9
Letting-in plates and screw bolts, each .....	0	0	9
Iron ties fixed, at per pound .....	0	0	7

## ROOFS,

AT PER SQUARE OF 100 FEET SUPERFICIAL, LABOUR AND NAILS ONLY.

Slit baulk roofing, labour and nails .....	0	7	0
Roofing to shed, rafters, 3 by 4, one or two stories.....	0	7	0
Common curb roofing do. ....	0	9	0
Common purloin roofing, with collar beam and principals 3 stories.....	0	17	0
Do. framed with principals, king posts, struts, &c.....	0	17	6
Do. with kings and queens.....	1	1	0

N. B. The above price is for principles only, the other rafters, to be paid for at per square, as common span roofing with purloins.

N. B. If any part be of oak scantling in do. add one-third to the above prices.

3 inch ridge, roll per foot run.....	0	0	8
Rafters, feet, do .....	0	0	7
Do. eaves board, do. ....	0	0	5
Hyps and valleys, do.....	0	0	8
Fixing screw bolts, each .....	0	0	8
Hanging do .....	0	1	6
Diagonal and dragon angular ties and struts, as fir framed on irregular plan to be paid for according to value.			

## FURRINGS OR BATTENINGS TO WALLS, FLOORS, RAFTERS, OR CIELING JOICE.

AT PER SQUARE OF 100 FEET SUPERFICIAL, ALL MATERIALS.

	£.	s.	d.
$\frac{1}{2}$ inch deal battening to walls .....	0	10	0
$\frac{3}{4}$ do. do. ....	0	13	0
Inch deal, do. do. ....	0	15	6
Do. $1\frac{1}{4}$ .....	0	17	6
Do. with $1\frac{1}{2}$ inch do. ....	1	2	0
Do. with two inch do. ....	1	7	0
Do. with $2\frac{1}{2}$ inch do. ....	1	13	0
Do. three inch do. ....	1	19	0
Do. with quarterings, 3 by 4 inches .....	2	0	0
Do. circular, in plain ribs of whole deal, 4 inches wide..	1	19	0
N. B. The foregoing are exclusive of wall-hooks, hold- fasts, or spikes, all of which are charged extra.			

## QUARTER PARTITIONS,

AT PER SQUARE OF 100 FEET SUPERFICIAL, LABOUR AND NAILS.

Partition, 3 by 4 .....	0	7	6
Do. on circular plan .....	0	10	6
Do. 5 inches scantling .....	0	8	6
Do. on circular plan .....	0	11	6
Do. 6 in ches scantling .....	0	9	6
Trussed partitions, do. ....	0	14	0
Trussed fronts to galleries, do. do .....	0	16	0
Ashlering do. per foot run .....	0	0	2
Trussed partitions with king post and braces .....	0	12	6
Do. with king and queen posts, &c. ....	0	14	0
Fir rough in bond plates, &c. per foot cube, labour and nails .....	0	0	5
Do. rough framed, naked floors, roofs, &c. ....	0	0	10
N. B. If any of oak add one-third to these prices.			

## GUTTERING,

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Inch deal bridged, gutters and bearers new .....	0	1	1
New whole deal, bridged, gutters and bearers .....	0	1	3
Do. and oak bearers .....	0	1	5
If to curb roof add .....	0	0	2
If to circular plan add .....	0	0	4
New whole deal gutters and bearers, planed underside ..	0	1	5
Whole deal wrought open trough gutter .....	0	1	3
Do. wrought and pitched .....	0	1	5
Inch fillet gutter and pitched do. ....	0	1	1
Whole deal aris gutter and pitched .....	0	1	1
If the two last be plowed and tongued .....	0	1	3

## WATER TRUNKS,

AT PER FOOT RUNNING MEASURE, ALL MATERIALS.

	L.	S.	D.
4½ inch deal trunk, pitched or put together with white lead .....	0	1	4
Inch deal 5 inch water trunks, do. and pitched .....	0	1	6
Do. 6 inch do. do. and do. ....	0	1	11
Whole do. 6 inch do. with impost neck .....	0	2	2
Do. shoe only .....	0	1	8
Do. hopper head .....	0	3	0
Do. moulded and capped .....	0	2	6
If scaffolding for fixing holdfasts, or brackets, to be charged extra.			

## DRAIN COVERING,

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Rough covering of whole deal .....	0	0	9
Do. inch and half .....	0	0	10
Do. two inch do. ....	0	1	1
Do. two and a half inch do. ....	0	1	3½
Do. three inch do .....	0	1	6½

## WEATHER BOARDING,

AT PER FOOT RUNNING, ALL MATERIALS.

IN SMALL QUANTITIES.

Rough feather-edged work in hips and valleys, different lengths .....	0	0	5
Do. with battens in do. ....	0	0	6
Do. on quartering to dormer window cheeks .....	0	0	8
Do. two sides, moulded, edged, and rebated, with bearers under .....	0	0	11

## WEATHER BOARDING,

AT PER SQUARE OF 100 FEET SUPERFICIAL, ALL MATERIALS.

Three-quarters Weather boarding, with boards .....	2	0	0
If with battens, add per square .....	0	5	0
Planed do .....	2	5	0
Do. do. with cyphered edges .....	2	8	0
Do. do. with moulded edges .....	2	10	0
Do. do. two sides and moulded .....	2	16	0
Do. do. and rebated or beaded .....	2	16	0
If scaffolding, to be charged extra.			

## BOARDING FOR SLATING, ALL MATERIALS,

AT PER SQUARE OF 100 FEET SUPERFICIAL, ALL MATERIALS.

Three quarters of an inch yellow boarding, rough .....	2	2	0
Edges shot and do .....	2	4	0

	£	s.	d.
Inch do. boarding, rough .....	2	12	0
Edges shot and do .....	2	14	0
N. B. Roofs covered for slates should be yellow deal, without sap.			

## CENTRING TO VAULTS, &amp;c.

## PER FOOT SUPER, ALL MATERIAES.

Centring to archways or bridgeways, per foot superficial	0	0	7
Double centres for elliptical arches, and ribbed, per foot super .....	0	1	2
Do. in small groins .....	0	0	10
Centring ribs, included with three-quarter deal covering, and sett, per square, use and waste .....	1	10	0
Do. if in small quantities, per foot superficial .....	0	0	6
Do. to windows, circular or camber, do. with struts, per foot run .....	0	1	0
Do. to gauged arches, or small apertures, each .....	0	1	3
Do. to do. circular heads .....	0	1	4
Do. elliptical .....	0	1	6

## FLOORS PER SQUARE, ALL MATERIALS, OF 100 FOOT SUPERFICIAL.

$\frac{3}{4}$ inch white deal, rough edges shot .....	2	4	0
Do. wrought and folding .....	2	8	0
Inch white rough deal, edges shot, do .....	2	14	0
Do. folding floors wrought .....	2	19	0
Do. straight joint .....	3	6	0
Whole white deal, rough edges, do .....	3	5	0
Do. planed and laid folding .....	3	10	0
Do. yellow deal, rough edges shot .....	3	7	0
Do. yellow folding free from sap .....	3	15	0
Do. straight joint .....	4	2	0
Do. tong'd headings, edge nailed .....	4	7	0
Inch and half yellow, rough edges shot .....	3	15	0
Do. planed and laid folding .....	4	0	0
Do. straight joint .....	4	7	0
Do. and tong'd headings .....	4	9	0
Two inch yellow, rough edges shot .....	5	2	0
Do. planed and folding .....	5	9	0
Inch and quarter battens, straight joint .....	4	14	0
Do. edge nailed and tong'd headings .....	5	0	0
Do. and second best deal, do .....	5	10	0
Do. and dowelled do .....	6	4	0
Do. and clean do .....	7	0	0
Whole, or $1\frac{1}{4}$ inch clean battened dowelled floors, do ..	8	0	0
Do. second best, do. do. do. do .....	6	10	0
Inch wainscot, dowelled floors .....	10	0	0
Inch and a quarter right wainscot dowelled flooring, new dry, and seasoned, do. ....	11l. to 13	0	0

£. s. d.

Do. with heading joints, ploughed, tong'd, and double dowelled, do .....	14	10	0
Inch and half narrow boards, heading joints ploughed and tong'd, dowelled with iron dowels, and laid down with iron dogs, do. less than five inch gauge .....	16	0	0
Two inch yellow deal listed, clear of sap, laid rough in barn floors, do. per square .....	6	6	0
Do. and jacked over straight joint, edges shot .....	6	14	6
Do. oak plank laid in do. and clear of sap, per do ....	8	10	0
Old dowelled floor, taken up and re-laid .....	1	17	6
Do. planed, cleaned, re-laid .....	2	2	0

One square of flooring will take of 10 feet boards.

24 Ten feet boards, at - - - 5 gauge.	
20 do. - - - - - 6 do.	
17 do - - - - - 7 do. 10 inches wanted.	
15 do - - - - - 8 do.	
13 do - - - - - 9 do. 2 feet 6 inches wanted.	
12 do - - - - - 10 do.	

One square of flooring will take of 12 feet boards.

20 Twelve feet board, at - - - 5 inch gauge.	
14 do - - - - - 6 do. 4 feet wanted.	
12 do - - - - - 7 do. 2 do.	
11 do - - - - - 8 do. 4 do.	
do - - - - - 9 do. 1 do.	
10 do - - - - - 10 do.	

N. B. One square of flooring will take 200 nails.

To make the latter tough, heat them in a fire shovel, (or the like)  
and put a bit of tallow or grease into them.

## PILE DRIVING

LABOUR, ENGINEER, AND SCAFFOLDING, PER FOOT CUBE.

	L.	s.	d.
Triming, ringing, and shoeing rough oak, elm, or beech from .....	11d	to	0 1 2
Sawed ditto .....	8d	to	0 0 11
Driving ditto .....	1s. 8d.	to	0 2 0
Preparing sheeting Piles .....	0	0	4
Ditto groved or gauge ditto .....	0	1	2
Ringin ditto &c. ....	1s 6d	to	0 2 6

# A TABLE OF SCANTLING MEASURE,

Shewing what length of any small piece of Scantling Timber will make a Cube, or solid Foot, the breadth and thickness thereof being given from 2 Inches to 1 Foot Square.

Inch by In.		Ft. In.	Inch by Inch.		Ft. In.
The breadth and thickness in inches.	2 by 2	36 0	The breadth and thickness in inches.	4 by 4	9 0
	2½	28 9		4 by 4	8 0
	3	23 10		5	7 2
	3½	20 6		5½	6 6
	4	18 0		6	6 0
	4½	16 0		6½	5 6
	5	14 4		7	5 1
	5½	13 1		7½	4 9
	6	12 0		8	4 6
	6½	11 1		8½	4 2
	7	10 0		9	4 0
	7½	9 7		9½	3 9
	8	9 0		10	3 7
	8½	8 6		10½	3 5
The breadth and thickness in inches.	9	8 0		11	3 3
	9½	7 6		11½	3 2
	10	7 3		1 Foot.	3 0
	10½	6 10	The breadth and thickness in inches.	5 by 5	5 9
	11	6 6		5 by 5½	5 2
	11½	6 4		6	4 10
	1 Foot.	6 0		6½	4 5
The breadth and thickness in inches.	3 by 3	16 0		7	4
	3 by 3½	13 8		7½	3 11
	4	12 0		8	3 7
	4½	10 8		8½	3 4
	5	9 7		9	3 2
	5½	8 0		9½	3 0
	6	8 0		10	2 10
	6½	7 4		10½	2 8
	7	6 10		11	2 7
	7½	6 4		11½	2 6
	8	6 0		1 Foot.	2 4
	8½	5 7	The breadth and thickness in inches.	6 by 6	4 0
	9	5 4		6 by 6½	3 8
	9½	5 0		7	3 5
	10	4 10		7½	3 2
	10½	4 9		8	3 0
	11	4 4		8½	2 9
	11½	4 2		9	2 8
	1 Foot.	4 0		9½	2 6
The breadth and thickness in inches.	3 by 3	16 0		10	2 5
	3 by 3½	13 8		10½	2 3
	4	12 0		11	2 2
	4½	10 8		11½	2 1
	5	9 7		1 Foot.	2 0
	5½	8 0	The breadth and thickness in inches.	6 by 6	4 0
	6	8 0		6 by 6½	3 8
	6½	7 4		7	3 5
	7	6 10		7½	3 2
	7½	6 4		8	3 0
	8	6 0		8½	2 9
	8½	5 7		9	2 8
	9	5 4		9½	2 6
	9½	5 0		10	2 5
	10	4 10		10½	2 3
	10½	4 9		11	2 2
	11	4 4		11½	2 1
	11½	4 2		1 Foot.	2 0
	1 Foot.	4 0			

Inch by Inch.	Ft.	In.	Inch by Inch.	Ft.	In.
The breadth and thickness in inches.	7 by 7		The breadth and thickness in inches.	9 by 9	
	7 $\frac{1}{2}$			9 $\frac{1}{2}$	
	8			10	
	8 $\frac{1}{2}$			10 $\frac{1}{2}$	
	9			11	
	9 $\frac{1}{2}$			11 $\frac{1}{2}$	
	10			1 Foot.	
	10 $\frac{1}{2}$				
	11			10 by 10	
	11 $\frac{1}{2}$			10 $\frac{1}{2}$	
	1 Foot.			11	
				11 $\frac{1}{2}$	
The length that will make a cube foot.	8 by 8		The length that will make a cube foot.	1 Foot.	
	8 $\frac{1}{2}$				
	9			10 by 10	
	9 $\frac{1}{2}$			10 $\frac{1}{2}$	
	10			11	
	10 $\frac{1}{2}$			11 $\frac{1}{2}$	
	11			1 Foot.	
	11 $\frac{1}{2}$				
	1 Foot.			11 by 11	
				11 $\frac{1}{2}$	
				1 Foot.	

N.B. To cut less than one inch is not worth notice.

All fir used in shoring, charge for use and waste one-third the value of the price of the same scantling; but if a large quantity is used and large scantling, one quarter is sufficient.

## EXPLANATION.

### OF THE FOREGOING TABLE.

In the first column of the table you have the breadth and thickness in inches, and in the second the length (according to such breadth and thickness) that will make a solid or cube foot, which is to be observed throughout the whole course of the table, observing also, that the figure 2 inches, which begins the table, govern the following number of inches and half inches, all the way down, and so on to one foot. Thus 2 inches by 2  $\frac{1}{2}$  inches, 2 by 3  $\frac{1}{2}$ , 2 by 4, &c. and to one foot. Then you begin with 3 inches by 3  $\frac{1}{2}$ , 3 by 4, 3 by 4  $\frac{1}{2}$  down to one foot; then with 4 inches by 4  $\frac{1}{2}$ , 4 by 5, 4 by 5  $\frac{1}{2}$ , &c. and to one foot, and so on progressively throughout the whole table.

### EXAMPLE I.

The use of the table.—Suppose a scantling or piece of quartering four inches broad, and 2 inches thick, how much in length

hereof will make a solid or cube foot? Look in the first table beginning with two inches, and a little lower in the same table is 4 inches the breadth, and opposite in the second column you will find 18 feet, which according to that breadth and thickness will make a solid or cube foot.

## EXAMPLE II.

Suppose the breadth and thickness of a scantling or quartering to be 5 inches by 3, or 3 by 5, which is the same, how much in length of that piece of timber must be cut off to make a cube foot?

Look as before in that part of the table which begins with 3 by  $3\frac{1}{2}$  in the left column, then finding 5 inches the breadth below it, and in the second column opposite to the 5, you will find 9 feet 7 inches in length, which will make a cube foot.

In measuring scantling, if a larger size be wanted than is in the table, take half the size in length and thickness, and multiply them together, and four times the product is the true cube contents.

Suppose a body of timber or stone 20 by 16 is given, the half of which is 10 by 8, those multiplied together, and that product by 4 times is the true content.

The above examples are fully sufficient to go through the table.

### A SHORT AND USEFUL TABLE, WHICH OUGHT TO BE ALWAYS IN MEMORY.

144 inches make one square foot.

1,728 Cubical inches make one cubical foot.

9 feet a square yard.

27 Cubical feet a cubical yard.

100 Superfical feet a square.

120 Deals make one hundred.

120 Uppers or scaffolding poles one hundred.

120 Nails make one hundred.

1,200 Do. make one thousand.

100 Laths, five feet long, make a bundle.

120 of four feet ditto, and 160 of 3 feet ditto.

### THE FOLLOWING QUANTITIES MAKE A TON.

12	feet cube of marble is	1 ton
16	ditto of Portland stone	1 do.
25	ditto of do. Ashlering	1 do.
55	ditto superficial Purbeck paving	1 do.
70	ditto ditto Yorkshire ditto 3 inches thick	1 do.
18	ditto of earth	1 do.
30	ditto of oak timber	1 do.
50	ditto of fir timber	1 do.
60	ditto of elm	1 do.
45	ditto of ash	1 do.
30	twelve feet $2\frac{1}{2}$ deals	1 do.
45	common stock bricks dry	1 do.

How many feet to a load of any kind of plank.

Inches thick.

Feet in a load.

1	600
1½	400
2	300
2½	240
3	200
3½	171
4	150
4½	131
5	120
5½	109
6	100
6½	92
7	85
7½	80
8	75
8½	73
9	68
9½	65
10	60
10½	55
11	54
11½	52

to a Load

12 inches square, 50 feet is a load, and also a ton.

The number of cube feet in every square of Flooring, Roofing, or Quarter Partitions, of the following different dimensions, the timber whereof are one foot in clear apart, which should not be more in either.

### ROOFS AND QUARTER PARTITIONS.

In. Inches.	Cube ft. In.
2 by 2½.....	2 10½
2 — 3.....	3 4
3 — 2½.....	4 3½
3 — 3.....	5 0
3 — 3½.....	5 7
3 — 4.....	6 8
3 — 4½.....	6 10
4 — 2½.....	5 8
4 — 4.....	8 4
4 — 4½.....	9 1
4 — 5.....	9 9½

NAKED FLOOR WITHOUT GIRDER.

5	— 2½	.....	7	2¼
5	— 3	.....	8	4
6	— 2½	.....	8	7½
6	— 3	.....	10	0
7	— 2½	.....	10	0½
7	— 3	.....	11	8
8	— 2½	.....	11	6
8	— 3	.....	13	4
9	— 2½	.....	12	11½
9	— 3	.....	15	0
10	— 2½	.....	14	4½
10	— 3	.....	16	3
11	— 2½	.....	15	9½
11	— 3	.....	18	4
12	— 2½	.....	17	3
12	— 3	.....	20	0

The above table of different scantlings will be found very useful to those who are unacquainted with taking squaring, and cubing dimensions, as also to them who have to make an estimate in a hurry, as those are the common dimensions of fir scantlings for joists, rafters, and quarters for floors, roofs, and partitions of second, third, and fourth-rate houses; the price per foot cube will be found in the tables.

N. B. Please to observe in the above table, that when a floor is squared, nothing is to be deducted for chimneys, as the extra thickness of the trimmers will make good for that deficiency; and in a quarter partition, the braces and extra thickness of the door-posts will make good for the opening, but the head and sill must be taken separate.

Further, let it be noted, that if the joist, or quarter in roofs or partitions are 13 inches asunder, one-twentieth of the quantity found is to be taken off; that if placed within 11 inches, one twentieth must be added

Although this book is not intended to treat of mensuration, yet, to accommodate my country friends, it has been hinted to me the measuring round timber would be very useful; being ever ready and willing to notice any hint for improvement, and to oblige all parties, having complied with the request, and in three different methods by arithmetic.

It is customary in measuring of round timber, if a tree is regularly taper from bottom to top, to girt the tree in the middle with a string, for a mean circumference between the two ends, then they double the string four times, and take that for the girt, or one side of the square, so that if a tree be four feet in circumference, the girt or side of the square is one foot. But if a tree be irregularly shaped, that is, does not hold its bigness regularly, then they measure it at twice or thrice, according as it falls, of the gradual size, and add all the several admeasurements together for the contents of the whole.

The dimensions being taken, you get the contents by either of these rules:

First.—Square the girt, that is, multiply it into itself, and that product by the length, and divide by 144, and the quotient is the contents.

Secondly, Multiply the square of the girt by the length, and that product by 12, and divide the last product by 1728, (the cubical inches in a foot), and the quotient is the contents in feet.

Thirdly, By duodecimal arithmetic, square the girt, and multiply the product by the length, and the last product is the contents.

An example wrought by all the three ways.—What is the solid content of a piece of timber, 16 inches girt and 8 feet long?

First.	Third.	Second.
16	1 4 0	16
16	1 4 0	16
<hr/>	<hr/>	<hr/>
96	0 5 4	96
16	1 4 0	16
<hr/>	<hr/>	<hr/>
256	1 9 4	256 the sq. of girt.
8 length	8	8
<hr/>	<hr/>	<hr/>
144) 2048 ( 14 feet	14 2 8	2048
144		12
<hr/>		<hr/>
608		1728) 24576 (14
576		1728
<hr/>		<hr/>
12) 32 (2 inches remains.		7296
24		6912
<hr/>		<hr/>
8 parts.		144) 384 (2 inc. remains.
		288
		<hr/>
		12) 96 (8 parts
		96

By the first way, the contents is 14 feet and 32 parts, which is 2 inches 8 parts.

By the second, 14 feet, 384 seconds, or 2 inches and 8 parts.

By the third, 14 feet, 2 inches, 8 parts.

The third method is the nearest, best, and most expeditious way of measuring by the pen.

DAY PRICES.  
BEST DEALS AND BATTENS.

	DEALS LENGTH.			DEAL PER FOOT			BATTENS LENGTH.			DITTO. PER FOOT.
	10 Feet.	12 Feet.	14 Feet.	R. Me.	Superfic.	June 1823	10 Feet.	12 Feet.	14 Feet.	R. Me.
3 inch..	8	10	11	d. 10	s. 1	11	s. 5	6	7	8
2½ inch..	6	8	9	d. 7	s. 0	11	4	5	6	5
2 inch..	5	6	7	d. 6	s. 0	9	3	4	5	4
1½ inch..	4	5	6	d. 5	s. 0	7½	2	3	4	3
1¼ inch..	3	4	5	d. 4	s. 0	6	2	3	4	3
1 inch..	3	3	4	d. 3	s. 0	5	2	2	3	2
¾ inch..	2	3	3	d. 2	s. 0	4	1	1	2	1
Slit ..	1	2	2	d. 1	s. 0	3½	1	1	1	1
	June 1823	June 1823	June 1823	June 1823	June 1823	June 1823	June 1823	June 1823	June 1823	June 1823

N. B. Till 1790, all deals that ran wider than 10½ inches, were called plank, and charged at per foot superficial; but since that time, if they run wider than nine inches, they are measured and charged superficial; and half deals, of six and seven feet long, are charged at half the price of 12 and 14 feet deals.

The above table is calculated at prime cost, the deals 50l. per hundred in the timber yard, and battens at 32l.

## MASTER JOINER'S PRICES.

## MASTER JOINER'S WORK.

## SLIT DEAL,

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

	L.	S.	D.
Rough slit deal .....	0	0	4
Do. with edge shot .....	0	0	4 $\frac{1}{2}$
Do. ledged or battened .....	0	0	6
Do. do. ploughed and tongued .....	0	0	5 $\frac{1}{2}$
Do. do. planed on one side .....	0	0	5 $\frac{1}{2}$
Do. do. and glued .....	0	0	6
Do. do. rebated or grooved, and beaded and plugged to walls .....	0	0	7
Do. do. and ledged or battened .....	0	0	7 $\frac{1}{2}$
Do. do. and cut circular .....	0	0	7
Do. do. bent to soffets, or frieze .....	0	0	8 $\frac{1}{2}$
Do. planed two sides .....	0	0	6 $\frac{1}{2}$
Do. do. cut circular .....	0	0	8 $\frac{1}{2}$
Do. do. and ledged .....	0	0	8 $\frac{1}{2}$
Do. do. ledged and battened .....	0	0	9 $\frac{1}{2}$
Do. do. and re-bated, or grooved and beaded .....	0	0	7 $\frac{1}{2}$
Do. do. and re-bated and dove-tailed .....	0	0	9

## THREE QUARTER DEAL.

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Rough $\frac{3}{4}$ deal .....	0	0	5 $\frac{1}{2}$
Do. with edges shot .....	0	0	6
Do. do. and battened, or ploughed and tongued .....	0	0	7
Do. do. cover boards and bearers .....	0	0	7 $\frac{1}{2}$
Planed on one side .....	0	0	7
Do. two sides .....	0	0	8
Do. and ledged or re-bated, or grooved and beaded .....	0	0	9
Do. framed .....	0	0	9
Do. covers and bearers to chimney caps .....	0	0	8
Do. ploughed, tongued and beaded .....	0	0	9 $\frac{1}{2}$
Do. do. legged shutters .....	0	0	11
Do. do. clamped or dove-tailed to drawers, 18 inches long	0	0	10 $\frac{1}{2}$

	L.	S.	D.
Do. in smaller do. or glued.....	0	0	11
Do. do. cut circular or scolloped.....	0	0	11

INCH DEAL, ALL MATERIALS.

AT PER FOOT SUPERFICIAL.

Rough one inch deal.....	0	0	7
Do. do. and edges shot .....	0	0	7½
Do. do. and bearers .....	0	0	9
Do. do. ledged or battened, ploughed and tongued, or rebated .....	0	0	8½
Planed on one side .....	0	0	8½
Do. do. part plugged to walls, or ploughed and tongued .....	0	0	9½
Do. do. re-bated and beaded, or clamped .....	0	0	9½
Do. dove-tailed .....	0	0	10½
Planed on both sides .....	0	0	9½
Do. do. cut circular .....	0	1	0½
Do. do. cut circular and glued up .....	0	1	2½
Do. covers and bearers to cornice.....	0	0	10½
Do. do. torus skirting .....	0	0	10½
Torus skirting add to two sides .....	0	0	1
Do. do. raking and scribed to steps .....	0	1	1½
Do. dove-tailed into drawers 18 inches long .....	0	1	0½
Do. and framed.....	0	0	10½

WHOLE DEAL, ALL MATERIALS.

PER FOOT SUPERFICIAL.

Rough 1½ inch deal, usually called whole deal .....	0	0	8
Do. with edges shot .....	0	0	8½
Do. and bearers.....	0	0	10
Do. planed on one side .....	0	0	9½
Do. ploughed and tongued, or clamped .....	0	0	10½
Do. dove-tailed .....	0	0	11½
Do. in drawer's fronts .....	0	1	0½
Do. cut circular, or scolloped, rebated, beaded, and ledged .....	0	0	11
Do. sunk, with moulded edges to shelves .....	0	1	0½
Do. and bearers .....	0	1	1½
Do. torus skirting .....	0	0	11½
Do. raking scribed to steps .....	0	1	2½
Do. cut circular .....	0	0	11½
Do. in splayed boxings .....	0	1	2½
Do. planed two sides .....	0	0	10½
Do. and ledged, or framed or grooved, or beaded.....	0	1	1
Do. clamped, or dove-tailed in drawers, &c.....	0	1	1½

	L.	D.	S.
Do. seats to pews, rounded edge and cut standards .....	0	0	10½
Do. in cut shelves, square edge .....	0	0	10½
Do. and moulded edge .....	0	1	0½

### INCH AND HALF DEAL, ALL MATERIALS.

AT PER FOOT SUPERFICIAL.

Rough one and a half inch deal .....	0	0	10½
Do. with edges shot .....	0	0	11
Do. and bearers .....	0	1	0½
Do. planed on one side .....	0	1	0
Do. and bearers .....	0	1	1½
Do. and rebated or beaded .....	0	1	1
Do. and rebated and beaded, grooved for shelves, and moulded edge .....	0	1	5
Do. dove-tailed .....	0	1	4
Planed one and a half inch deal, both sides .....	0	1	1
Do. and rounded edge, and bearer, or framed, or clamp- ed, or tongued .....	0	1	3
Do. and glued up .....	0	1	4

### TWO INCH, OR DOUBLE DEAL, ALL MATERIALS.

AT PER FOOT SUPERFICIAL.

Rough two inch deal .....	0	1	0½
Do. and edges shot .....	0	1	1¼
Do. and bearers .....	0	1	3½
Do. planed on one side .....	0	1	2½
Do. and framed or clamped .....	0	1	4
Do. keyed and clamped .....	0	1	5½
Do. and cut circular .....	0	1	9
Planed do. two sides .....	0	1	3½
Do. and rebated, or clamped, or framed .....	0	1	5
Do. the heading joints ploughed and tongued .....	0	1	6
Do. and cut circular .....	0	1	10

### TWO INCHES AND A HALF PLANK, ALL MATERIALS.

AT PER FOOT SUPERFICIAL.

Rough 2½ inch deal .....	0	1	1½
Do. edges shot .....	0	1	4
Do. rebated, grooved, and beaded, or ploughed and tongued .....	0	1	6
Do. planed on one side .....	0	1	5½
Do. two sides .....	0	1	6½
Do. and bearers, or ploughed and tongued, or rebated, grooved and beaded .....	0	1	8½

	L.	S.
Do. framed, rebated, and beaded, or dove-tailed .....	0	1 9 $\frac{1}{2}$
Do. rebated, grooved, beaded, or ploughed and tongued .....	0	1 8 $\frac{1}{2}$
Do. framed, rebated and beaded .....	0	1 9 $\frac{1}{2}$
Do. mitred plinth and bases, or dove-tailed .....	0	1 10 $\frac{1}{2}$
Do. in grooved stall board, beaded edge .....	0	1 8 $\frac{1}{2}$
Do. in two sides, cut circular .....	0	2 2 $\frac{1}{2}$

### THREE INCH PLANK.

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Rough three inch deal .....	0	1 5 $\frac{1}{2}$
Do. edges shot .....	0	1 6 $\frac{1}{2}$
Do. rebated, grooved, and beaded, or ploughed and tongued .....	0	1 8 $\frac{1}{2}$
Do. planed on one side .....	0	1 8
Do. and bearers, or ploughed and tongued .....	0	1 11 $\frac{1}{2}$
Do. rebated, grooved and beaded, or dove-tailed .....	0	2 1 $\frac{1}{2}$
Do. framed, rebated, and beaded .....	0	1 11 $\frac{1}{2}$
Do. and planed on two sides .....	0	1 9 $\frac{1}{2}$
Do. ploughed and tongued .....	0	2 0
Do. keyed or clamped .....	0	2 0 $\frac{1}{2}$
Do. morticed clamped .....	0	2 3 $\frac{1}{2}$

### DADO, ALL MATERIALS.

AT PER FOOT SUPERFICIAL.

Three quarters of an inch keyed dado .....	0	0 10
Do. raking and scribed to stairs .....	0	1 0 $\frac{1}{2}$
Inch dado, and keyed .....	0	0 11
Do. ploughed and tongued .....	0	1 1
Do. if feather tongued .....	0	1 2
Do. circular on plan flat sweep .....	0	1 10
Do. quick sweep .....	0	2 2
Do. raking, and scribed to steps of stairs .....	0	1 4 $\frac{1}{2}$
Do. do. for circular to do. ....	0	2 6
Whole deal, and keyed .....	0	1 2
Do. level circular plain flat sweep .....	0	2 0
Do. quick sweep .....	0	2 6
Do. wreathed to do. ....	0	3 6

N.B. Circular dado is commonly valued at double price, and the cylinder, which it is glued upon, charged extra: but in general it ought to be valued according to its workmanship, which must be inspected.

A whole deal circular dado, glued upon a cylinder, backed and wedged, including a plinth and torus, executed in a good workmanlike manner, true to the sweep, per foot super. .... 0 3 2

L. S. D.

Do. deal circular raking dado to stairs, the plinth and torus all the way scribed down, with the grain horizontal; the moulding of the torus to be two inches above the nosing of the steps, true to the sweep, and not filled in with gussets do. .... 0 4 6

## WAINSCOTTING,

AT PER FOOT SUPERFICIAL, ALL MATERIALS, FACIA AND SKIRTING INCLUDED.

Inch deal, square frame to ceilings .....	0	0	9 $\frac{1}{2}$
Do. dwarf .....	0	0	10 $\frac{1}{2}$
Whole deal do. ....	0	0	11
Do. moulded or bead butt .....	0	1	1
Do. bead flush .....	0	1	2
Do. three reeds .....	0	1	3
Whole deal dwarf square framed .....	0	1	1
Do. moulded or bead butt .....	0	1	3
Do. flush bead .....	0	1	4
Do. and three reeds .....	0	1	5
If framed two pannels high square .....	0	1	2
If raking to stairs .....	0	1	4
Do. circular .....	0	2	1
If raised moded .....	0	1	5
Beaded cappings per foot run .....	0	0	2 $\frac{1}{2}$
Circular do. ....	0	0	3 $\frac{1}{2}$
If circular on plan, once and half the strait .....			
Quick sweep double do. ....			

## CHIMNEY FRONTS.

AT PER FOOT SUPERFICIAL, FRAMED AND SQUARE, ALL MATERIALS.

Inch deal, wrought one side .....	0	0	9 $\frac{1}{2}$
Do. framed flush .....	0	0	10 $\frac{1}{2}$
Whole deal do. ....	0	0	11
Do framed flush .....	0	1	1
Inch and half deal do. ....	0	1	2
Do. framed flush .....	0	1	4

## PLAIN DOOR JAUMB LININGS AND SOFFEETS.

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

3/4 inch deal linings and battened behind, do. ....	0	0	9 $\frac{1}{2}$
3/4 inch deal beaded linings .....	0	0	8 $\frac{1}{2}$
3/4 inch deal linings, wrought and grooved .....	0	0	8 $\frac{1}{2}$
1 inch deal linings, single rebated .....	0	0	10 $\frac{1}{2}$
Do. deal beaded linings .....	0	0	11

	L.	S.	D.
Whole deal linings, single rebated.....	0	0	11 $\frac{1}{2}$
Do. and beaded.....	0	1	0 $\frac{1}{2}$
Do. double rebated .....	0	1	1
Do. and beaded .....	0	1	2
Do. back linings framed square, and double rebated.....	0	1	2
Do. framed flush .....	0	1	3
Do. bead butt or moulded.....	0	1	5
Do. soffet circular on plan one edge .....	0	2	0
Do. both edges.....	0	3	0
Do. and semi-circular soffet.....	0	6	6
The lining to be back rebated for grounds.			

### PARTITIONS FACIA, AND SKIRTING INCLUDED.

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Inch and $\frac{1}{4}$ square framed .....	0	1	0 $\frac{1}{2}$
Inch and $\frac{1}{2}$ do. do.....	0	1	2 $\frac{1}{2}$
Do. bead butt, or molded do. ....	0	1	4 $\frac{1}{2}$
Do. bead flush and square.....	0	1	5 $\frac{1}{2}$
Do. and molded both sides .....	0	1	6 $\frac{1}{2}$
Two inch square framed.....	0	1	6
Do. bead butt, or moulded do.....	0	1	8
Do. bead flush and square, or moulded both sides.....	0	1	9
Do. bead flush and bead butt .....	0	1	11
Do. bead flush (or molded) on both sides.....	0	2	2
Do. if three reeds .....	0	2	4
If circular on plan once and half the strait			
If quick sweep, double strait.			

### DOORS LEDGED ALL MATERIALS.

AT PER FOOT SUPERFICIAL.

$\frac{3}{4}$ inch deal, rough.....	0	0	9
Do. ploughed and tongued .....	0	0	10
Do. planed.....	0	0	11
Do. ploughed and tongued.....	0	1	0
Inch deal rough ledged doors .....	0	0	10 $\frac{1}{2}$
Do. ploughed and tongued .....	6	0	11 $\frac{1}{2}$
Do. planed.....	0	1	0 $\frac{1}{2}$
Do. do. ploughed and tongued .....	0	1	1 $\frac{1}{2}$
Whole deal, rough ledged doors.....	0	1	0
Do. ploughed and tongued, or rebated .....	0	1	1
Do. planed .....	0	1	2
Do. ploughed and tongued.....	0	1	3
Do. if beaded.....	0	1	4
Do. inch and half .....	0	1	5
Do. ploughed and tongued, or rebated .....	0	1	6
Do. if hung folding .....	0	0	2

## FRAMED DWARF DOORS.

AT PER FOOT SUPERFICIAL ALL MATERIALS.

	L.	s.	d.
Inch deal, one pannel square.....	0	1	0
Do. planed on two sides .....	0	1	1
Do. ploughed, tongued, and beaded .....	0	1	1
Do. two pannel square doors.....	0	1	2
Do. quarter round, flat square on the back .....	0	1	3
Do. two pannel doors, ovolo flat, or moulded .....	0	1	4
Do. two pannel doors, quarter round, flat and square back .....	0	1	4
Do. do. ovolo flat, bead and flush back.....	0	1	7
Do. do. quarter round, one side square on the back.....	0	1	4
Inch deal, two pannel square.....	0	0	11 $\frac{1}{2}$
Do. four pannel do. ....	0	1	0 $\frac{1}{2}$
Whole deal, two pannel square.....	0	1	0
Do. four pannel do. ....	0	1	1
Do. bead butt or moulded square .....	0	1	3
Do. bead flush and square.....	0	1	4
Inch and half four pannel square .....	0	1	3
Do. bead butt, or moulded square.....	0	1	5
Do. bead flush and square .....	0	1	6
Do. bead flush and bead butt or moulded back .....	0	1	8
Do. moulded both sides.....	0	1	8
Do. bead flush both sides .....	0	1	9
Inch and half six pannel square .....	0	1	5
Do. bead butt or moulded square.....	0	1	7
Do. bead flush and square .....	0	1	8
Do. bead flush, or bead butt or moulded .....	0	1	11
Do. bead flush both sides .....	0	2	1
If three reeds instead of bead flush .....	0	0	1
If raised moldings.....add each side.....	0	0	1
Do. circular on plan, flat sweep, once and half strait.			
Do. $\frac{1}{2}$ inch to foot, double, strait.			

## TWO INCH DOORS.

AT PER FOOT SUPERFICIAL, ALL MATERIALS

Two inch deal four pannel square doors .....	0	1	7
Do. molded and square .....	0	1	9
Do. bead flush and square .....	0	1	10
Do. and bead and flush both sides .....	0	2	1
Do. ovolo and flat both sides .....	0	1	11
Grecian quirk ovolo, or ogee, and square .....	0	1	10
Do. ditto on both sides.....	0	2	1
Do. do. ovolo, flat, two sides and double margin .....	0	2	4
Two inch deal quirk ovolo, bead on both sides, double margin .....	0	2	6
If folding, add per foot superficial .....	0	0	2

TWO INCH SIX PANNEL DOORS.

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

	L.	S.	D.
Square six pannel door .....	0	1	9 $\frac{1}{2}$
Moulded and square .....	0	1	11 $\frac{1}{2}$
Bead butt and square .....	0	1	11 $\frac{1}{2}$
Bead flush and square, or moulded .....	0	2	0 $\frac{1}{2}$
Do. and bead butt .....	0	2	2 $\frac{1}{2}$
Do. and bead flush .....	0	2	3 $\frac{1}{2}$
If with double margins add .....	0	0	5
Raised pannels per foot extra .....	0	0	3
If molded on the raisings, ditto .....	0	0	2
Quirk ogee bead and square .....	0	2	3
Ditto on both sides .....	0	2	7

TWO AND HALF INCH FOUR PANNEL DOORS.

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Square four pannel door ...	0	1	9 $\frac{1}{2}$
Molded and square .....	0	1	11 $\frac{1}{2}$
Bead butt and square .....	0	2	0
Bead flush and square .....	0	2	1
Molded both sides .....	0	2	1 $\frac{1}{2}$
Do. and bead butt .....	0	2	1
Do. and bead flush .....	0	2	3
Do. bead flush and bead butt .....	0	2	3 $\frac{1}{2}$
Bead flush or quirk ogee, bead both sides .....	0	2	4 $\frac{1}{2}$

TWO INCH AND HALF SIX PANNEL DOORS.

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Two inch and a half six pannel door, square .....	0	2	0 $\frac{1}{2}$
Do. moulded and square .....	0	2	2 $\frac{1}{2}$
Do. framed, bead butt, and square .....	0	2	3 $\frac{1}{2}$
Do. bead flush and square .....	0	2	4 $\frac{1}{2}$
Do. molded on both sides .....	0	2	4 $\frac{1}{2}$
Do. and bead butt .....	0	2	5 $\frac{1}{2}$
Do. and bead flush .....	0	2	6 $\frac{1}{2}$
Bead flush and bead butt .....	0	2	7 $\frac{1}{2}$
Bead flush both sides .....	0	2	8 $\frac{1}{2}$
Do. six pannels ovolo, and pannels raised with a bead, and faint hollow, bead and flush back .....	0	3	0
Do. ovolo and raised pannels on both sides .....	0	3	2
Grecian quirk ogee, or quirk ovolo, on both sides ..	0	2	10
Moulded door one side, and what is on the pannels, per foot run .....	0	0	2
Or take it running extra every bead .....	0	0	1
Six pannel 2 $\frac{1}{2}$ inch deal doors, framed, bead, and flush in front, ovolo raised on the back, and ovolo on the raisings .....	0	3	4

	L.	S.	D.
Do. ovolo flat one side, octagon pannel the other.....	0	3	4
Do. ovolo, raised with bead and hollow on the front, and ovolo flat on the back .....	0	2	10

N.B. There are many deal front doors made with raised pannels, and beaded in many different forms, according to fancy and variety, worth from 2s. 9d. to 4s. 0d. per foot superficial.

Reveal shuts to doors are measured extra, and the sash made good for the pannel

### WAINSCOT DOORS.

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Inch and quarter four pannel, double moulded .....	0	3	10
Inch and half doors.....	0	4	6
Two inch six pannel, double moulded.....	0	5	6
Two inch ovolo, or quirk OG and beaded, with double margin in the middle, raised pannels both sides, with astragal mouldings on do. the raisings cross banded..	0	7	6
Two and a half do.....	0	8	0
Do. ovolo and flat pannels.....	0	7	0
Do. bead and flush hatch doors.....	0	7	0

### MAHOGANY DOORS.

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Two inches and half solid mahogany folding doors, six or eight pannels, and double margin in the middle, framed quirk OG, and beaded both sides, raised pan- nels; with astragal mouldings round do. risings cross- banded, or fluted, face of the pannels, stiles, muntion rails, and edges of the stiles veneered on both sides alike, at per foot superficial, .....	18s. Od. to	1	0	0
Do. two inch blank doors on one side .....	10s. Od. to	0	11	6
Do. jaumbs and soffets to do. ....	11s. Od. to	0	12	0
Do. two and a half framed with ovolo, quirk OG, and beaded, raised pannels both sides, facing of pannels veneered both sides face raising cross-banded, or fluted faces of pannels, stiles, rails, and edges, and raisings veneered on both sides alike, an astragal moulding and bead put on all the pannels at per foot superficial, 1l. 0s. Od. to .....	1	5	0	
Do. two inch and half blank doors on one side .....	12s. Od. to	0	15	0
Do. jaumbs and soffets.....		0	15	0
Do. two and a half framed ovolo raised pannels on both sides, veneered on the face with an astragal mould- ing round one side, and solid raisings on the other, 16s. to.....		1	0	0
Do. blank door on one side .....		0	12	0
Do. two inch doors, OG flat on both sides.....		0	14	0

	L.	s.	d.
Two inch and half doors, framed with the best dry seasoned deal, six pannelled, and well veneered over with mahogany choice veneers; raised moulding on the rising, bead and flush back, if well executed, per foot superficial .....	10s.	0d.	to
Two inch do.....	0	9	0
Inch and half do.....	0	7	0
Two inch six or eight pannel do. double margin, ovolo and raised pannel, veneered an the face, and the moulding mitred round, per foot superficial....	13s.	0d.	to
Inch and half do .....	9s.	0d.	to
N. B. It is impossible to fix an exact price without inspection; according to the quality of the wood, and goodness of the workmanship, when the work is completed.			

If any of the above doors are circular on plan flat sweep, once and half the strait.....

Do. if  $\frac{1}{2}$  inch to the foot donble strait.....

Do. if  $\frac{3}{4}$  inch to the foot, twice and half the strait.....

Do. if with circular heads to be measured from the springing, twice and half the strait .....

### SASH DOORS.

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Inch and half ovolo, two pannel, square bottom .....	0	1	3
Do. bead butt and square.....	0	1	4
Do. bead flush and square.....	0	1	5
Do. molded and square, or bead butt .....	0	1	5
Do. and bead flush.....	0	1	6
Do. if raised molded.....add each side.....	0	0	1
If diminished styles, ditto.....	0	0	2

### TWO INCH SASH DOORS.

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Two inch deal ovolo, two pannel square bottom .....	0	1	6
Do. head butt and square, or molded .....	0	1	7
Do. bead flush and square, or molded both sides bead butt	0	1	9
Do. and bead flush .....	0	1	10
Do. and diminished styles.....	0	2	1
Two inch sash doors diminished styles, shutters framed, beaded, and flush to seem six pannels, as square back	0	2	8
Do. do. and molded or beaded butt.....	0	2	9
Do. do. and bead flush back .....	0	2	10
N. B. If $2\frac{1}{2}$ inch doors, add one-sixth to do.			
If astragal and hollow, add per foot .....	0	0	$1\frac{1}{2}$
If hung folding, add .....	0	0	3
Inch and half wainscot, the two bottom pannels molded, or bead, flush, and square.....	3s.	0d.	to
	0	3	10

	L.	s.	d.
Do. if mahogany .....	3s.	6d.	to 0 5 6
If molded both sides, add .....	0	0	10
If hung folding, ditto .....	0	6	

## GATES AND COACH-HOUSE DOORS.

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Two inch deal gates, or doors, framed, rebated, and beaded, ledged, and braced with inch and quarter deal ..	0	1	11
Two inch and half do. in twelve or eighteen pannels, and a wicket in do. ....	0	3	1
Do. in nine pannels, wrought with a moulding, and raised pannels on each side, and a small gate in ditto	0	2	10
Three inch deal framed gates, in 24 or 30 pannels, bead and flush on both sides, and a wicket door .....	0	5	8
Being ramped and hanging are charged extra.			
Two and a half deal do. lower part bead, butt and upper part filled in with pallisades to be like fence .....	0	2	9
Two inch deal pallisade gates, the lower part flush, square, upper part filled in as before .....	0	1	11
If any of these gates or doors be framed with a wicket, addone eighth for materials, and one-sixth for labour.			
All fancy gates to be paid for as per value.			

## SASH FRAMES AND SASHES.

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Deal cased sash frames, oak sunk cills, 1½ inch deal sashes double hung with iron weights, pullies, and pins, wainscot boxings, beads and tongues complete	0	1	9
Do. and brass pullies, double hung .....	0	1	11
Do. with astragal and hollow sashes, single hung .....	0	1	11
Do. do. double hung .....	0	2	1
Do. circular on plan ¼ inch to foot .....	0	3	0
Do. ½ inch ditto .....	0	3	6
Do. circular head measured at springing .....	0	3	6
Do. circular circular .....	5s.	9d.	to 0 6 9
Do. if Paladian or Venetian head with wainscot, pulley-pieces, and beads .....	6s.	4d.	to 0 7 3
Do. mahogany .....	0	8	0
Deal cased sash frames, oak cills, 1½ inch wainscot sashes, double hung with white lines, brass pullies, and iron weights .....	0	3	0
Do. double hung with wainscot beads and tongues .....	0	3	3
Do. with 1½ inch astragal mahogany sashes .....	0	3	10
Deal cased sash frames, as above, and two inch wainscot sashes single hung .....	0	3	2
Do. with brass pullies, double hung .....	0	3	6
Do with two inch mahogany astragal, and hollow sashes	0	4	6

	L.	S.	D.
Do. with 2½ inch mahogany astragal and hollow sashes, double hung.....	0	5	0
Deal cased sash frames, oak cills, double rebated wain- scot pulley pieces and slips, two inch single hung wain- scot sashes, brass pullies and lead weights .....	0	3	2
Do. double hung .....	0	3	5
Do. double hung mahogany ...	0	4	6
Solid deal sash frames, with large broad oak cill, 1½ inch ovolo wainscot sashes to slide sideways, and box wheels to ditto with beads and stops .....	0	2	9
Do. deal solid sash cill fir, 1½ inch fixed wainscot sashes	0	2	3
Do. sashes and frames circular on plain ¼ inch to foot..	0	2	10
Do. and ½ inch to foot .....	0	3	6
Do. and circular head measured from springing.....	0	4	0
Do. circular circular.....	0	6	3
If Venetian or Paladian, add.....	0	0	6
If do. scheme head, do.....	0	0	6
Do. if with wainscot pulley pieces and beads, do....	0	0	6
Do. if mahogany, do.....	0	0	9
Deal cased frames, oak sunk cills, wainscot pulley pieces, and beads, with two inch right wainscot ovolo sashes, brass pullies, white lines, and iron weights, double hung .....	0	3	6
Do. circular on plan ¼ inch to foot.....	0	4	0
Do. ½ inch do.....	0	5	6
Do. and circular head, measured at spring'd.....	0	5	6
Do. and circular circular.....	0	6	9
Do. Venetian or Paladian, add.....	0	0	9

SASH FRAMES ONLY.

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Deal cased sash frames, and oak sunk cills, to run single, iron pullies, for 1½ sashes.....	0	0	10
Do. prepared to hang double.....	0	0	11
Do. for two inch sashes.....	0	0	11
Do. to hang double.....	0	1	1
Do. circular on plan flat sweep.....	0	1	7
Do. ¼ inch to the foot.....	0	1	7
Do. and ½ inch to the foot .....	0	2	2
Do. and scheme head.....	0	1	8
Do. circular head, measured from springing .....	0	2	3
Do. circular circular .....	0	4	4
If Venetian or Paladian frames, add .....	0	0	6
Deal cased sash frames, wainscot pulley pieces, beads, and oak cills, double sunk for 1½ inch sashes, to run single, and brass pullies.....	0	1	6
Do. to hang double.....	0	1	8

L. s. D.

Deal cased sash frames, mahogany pulley pieces, oak cills, double rebated beads and tongues, double hung with brass boxes and pulleys for two inch sashes. ....	0	2	1
Solid frames, oak sunk cills, weathered, throated, rebated and beaded, for French casements .....	0	1	2
Do. circular on plan flat sweep .....	0	1	6
Do. and $\frac{1}{2}$ inch to the foot .....	0	1	9
Do. and $\frac{3}{4}$ inch to do. ....	0	2	3

1817.	1817.	1817.
Deal Sashes.	Wainscot Sashes.	Mahogany Sashes.
s. D.	s. D.	s. D.
0 10	1 2	1 5
1 0	1 4	1 7
1 2	1 6	1 9
1 0	1 5	1 8
1 2	1 7	1 10
1 4	1 9	2 0
1 5	2 3	2 10
0 11	1 4	1 8
1 1	1 6	1 10
1 3	1 8	2 0
1 1	1 7	1 11
1 3	1 9	2 1
1 5	1 11	2 3
1 2	1 9	2 1
1 4	1 11	2 3
1 6	2 1	2 5

## SASHES ONLY, ALL MATERIALS.

## INCH AND HALF.

Ovolo sashes, per foot, superficial, fixed.....  
 Do. single hung, do.....  
 Do. double hung, do.....  
 Do. astragal and hollow, fixed.....  
 Do. single hung, do.....  
 Do. double hung, do.....  
 Circular or octagon fancy sashes, do. measure double  
 Shop window sashes, circular on plan, flat sweep....

## TWO INCH SASHES ONLY.

Ovolo sash, per foot superficial, fixed.....  
 Do. single hung, do.....  
 Do. double hung, do.....  
 Astragal and hollow, do. fixed.....  
 Do. single hung, do.....  
 Do. double hung, do.....  
 Octagon figure sashes, do. fixed.....  
 Do. single hung, do.....  
 Do. double hung, do.....  
 Circular fancy shop sashes fixed.....  
 Circular fan sashes over door.. }

measure double  
 N.B. For cant corner shop windows fixed, 4s. 6d. each; if large and lofty, 5s. each; and circular ends or return angle bars, 4 lights, and extra 7s. or more than circular on plan one half.

SASHES CONTINUED.

	L.	S.	D.
Inch and half or 2 inch sashes, circular on plan, flat sweep	0	1	5
Do. $\frac{1}{4}$ inch to foot	0	1	7
Do. and $\frac{1}{2}$ inch to do.	0	1	10
Do. circular head, measured at springing	0	2	6
Do. Gothic heads, ditto	0	3	6
Do. circular circular	0	5	5
Do. circular end of shop sashes four lights high, the radius			
eight inch sper foot run	0	2	6
Do. nine inch radius	0	2	10
If wainscot do. add per foot super	0	0	7
If circular in do.	0	0	10
Do. if mahogany do.	Sd. to 0	1	0
Do. if circular, do.	0	0	9

SKYLIGHTS,

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Deal inch and half ovolo straight flat skylight, per foot			
superficial	0	0	9 $\frac{1}{2}$
Two inch do.	0	0	11
Do. hipt and revealed, do.	0	1	5
Wainscot inch and half flat sky-light do.	0	1	4
Do. two inch do.	0	1	7
Do. hipt and revealed, do.	0	2	1
Do. flat skylight, super	0	1	7
Do. hipt and revealed	0	2	1
Do. circular domical skylight, do.	0	3	9
Do. oval domical skylight, do.	0	4	6
If on irregular plan, add	0	0	9

FRENCH CASEMENTS,

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Inch and $\frac{1}{2}$ deal ovolo	0	1	0
Two inch deal do.	0	1	2
Do. wainscot do.	0	1	11
Do. mahogany do.	0	2	3
Two and a half wainscot do.	0	2	5
Do. mahogany do.	0	2	9
any of do. in two heights, add per foot	0	0	6
Do. circular on plan flat sweep once and half straight			
Do. and $\frac{1}{4}$ inch to the foot twice do.			
Do. and $\frac{1}{2}$ inch to do. twice and half do.			
For astragal and hollow in deal, add	0	0	2
Do. in wainscot or mahogany, do.	0	0	3
Do. on the circular	0	0	3

## INSIDE SHUTTERS,

FITTED AND HUNG, AT PER FOOT SUPERFICIAL, ALL MATERIALS.

	L.	s.	D.
Three quarters deal clampt back flaps, one height.....	0	1	0
Do. in two heights ..	0	1	2
Inch deal clampt back flaps, one height.....	0	1	2
Do. in two heights ..	0	1	4
Inch deal framed square one height, 2 pannels ..	0	1	3
Do. in two heights ..	0	1	5
Whole deal, clampt inside shutters, one height ..	0	1	2½
Ditto in two heights ..	0	1	4½
Do. two pannels ovolo flat square back, one height ..	0	1	5
Do. in two heights ..	0	1	7
Do. three pannels, one height do. ....	0	1	6
Do. four pannels, and in two heights ..	0	1	10
Do. moulded or bead butt and square ..	0	1	10
Do. do. or bead butt both sides.....	0	2	0
Do. if raised moulded ..	0	2	1
Do. bead flush and square ..	0	1	11
Do. and bead butt.....	0	2	1
Do. on both sides ..	0	2	2
If any of the above shutters are inch and half deal, add	0	0	2
If circular on plan flat sweep, add per foot double straight			
If ½ inch to foot, twice and half do.			
Small astragal or 3 reeds mitred round pannels, per foot			
run ..	0	0	4
Bead cappings, each ..	0	0	6
N.B. All shutters under one foot in width, are worth			
from 1½d. to 2d. per foot super more for labour than			
those of the same kind of work which are one foot six			
inches wide.			

## BOXINGS,

AT PER FOOT RUN, ALL MATERIALS.

Inch deal splayed ..	0	0	5½
Do. proper boxings.....	0	0	6½
Whole deal splayed.....	0	0	6
Whole deal proper boxings ..	0	0	7
Do. circular on plan flat sweep ..	0	1	0
Do. inch and half do. glued in thickness ..	0	1	3
Do with cemi-heads ..	0	1	6
Inch boxings for sliding shutters, pulley pieces, linings,			
beads, and fillets included ..	0	1	4
Do. inch and quarter ditto ..	0	1	5

## OUTSIDE WINDOW SHUTTERS,

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

¾ inch ledged shutters, at do. ....	0	1	0
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	L.	S.	D.
Inch yellow deal clampt sliding .....	0	1	0
If morticed and clamped .....	0	1	1
Whole deal, two pannels, square .....	0	1	2
Do. bead and butt do. ....	0	1	4
Do. bead flush and square .....	0	1	5
Do. bead flush and bead butt .....	0	1	7
Do. bead flush both sides .....	0	1	8
Inch and half do, two pannels, framed bead, butt and square .....	0	1	6
Do framed ovolo, and flat bead and flush, and bead butt .....	0	1	9
Do. bead flush two sides do, .....	0	1	10
If 3 reeds, instead of bead flush, add .....	0	0	1½
If any of the above are framed in three pannels, add one-sixth			

Cemi-circular heads measured nett twice and half the straight

### SKIRTINGS,

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Slit square do. ....	0	0	7
Do. raking do. ....	0	0	9½
¾ deal square do .....	0	0	8
Do. raking do. ....	0	0	11
Inch deal plain .....	0	0	9½
Do. raking do. or torus .....	0	1	0½
Do. level, circular on the plan, keyed and grooved do. ....	0	1	5
Raking do. ....	0	1	11
Level circular torus do. ....	0	1	7
Raking do. ....	0	2	4
Inch deal wreathed solid do. ....	0	3	0
Do. do. grooved and keyed do. ....	0	3	3
Do. do. in thickness do. ....	0	3	6
Inch torus skirting do. ....	0	3	4
Do. torus raking do. plain .....	0	3	10
N. B. If plugged add to level 2½d. or raking 3d. wreathing, ramped or circular 5d.			
Torus bead moulding on skirting to stone stairs p. foot run .....	0	0	3
Do. ramped or circular .....	0	0	6
Do. wreathed thickness .....	0	0	9
D. wreathed narrow skirting per foot run .....	0	0	6
Do. add if plugged to wall .....	0	0	5

### SHOP FRONT SHUTTERS,

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Inch and ½ two pannel bead butt and square .....	0	1	3
Do. bead flush and square .....	0	1	4
Do. in three pannels bead butt and square .....	0	1	4



	L.	S.	D.
Do. bead flush and square .....	0	1	5
Do. bead flush and bead butt .....	0	1	7
Do. bead flush two sides .....	0	1	8
Do. circular on plan flat sweep .....	0	2	9
Do. and half inch to the foot .....	0	3	3
If 3 reeds instead of bead flush, add per foot .....	0	0	1 $\frac{1}{2}$
Scheem heads measured nett is allowed double price			
Cemi-circular heads three times			
N. B. As shop front sashes are commonly made straight in the middle and circular at the end, they are worth half the price extra more than circular on plan.			

### INSIDE SLIDING SHUTTERS, OR HUNG AS SASHES,

Including Lines and Weights,

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Inch two pannel square .....	0	1	4
Whole deal do. do. ....	0	1	6
Do. moulded, or bead butt and square .....	0	1	8
Do. bead flush and square .....	0	1	9
Do. bead flush and bead butt .....	0	1	11
If raised molded add per foot .....	0	0	2
If three reeds do. ....	0	0	1 $\frac{1}{2}$
If any of the above are inch and half deal, add per foot super. ....	0	0	2
Circular flat sweep once and a half, if $\frac{1}{4}$ inch to the foot twice the strait; if $\frac{1}{2}$ inch to the foot twice and a half to the strait			

### BACKS, ELBOWS, AND SOFFEETS,

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Inch deal rebated or keyed - - - - -	0	0	10 $\frac{1}{2}$
Do. framed square do. - - - - -	0	0	10 $\frac{1}{2}$
Do. framed flush do. - - - - -	0	1	1
Whole deal framed square - - - - -	0	1	0
Do. moulded or bead butt - - - - -	0	1	2
Do. raised moulded - - - - -	0	1	3
Do. bead flush - - - - -	0	1	3
Do. with mouldings on risings, do. - - - - -	0	1	4
Do. framed, bead and butt - - - - -	0	1	2
Do. framed, bead and flush do. - - - - -	0	1	3
Do. OG and bead, flat pilaster pannels, do. - - - - -	0	1	4
Do. and raised pannels, do. - - - - -	0	1	7
Do. and moulding on rising, do. - - - - -	0	1	8
N. B. If on a circular plan, double measure is added for backs and elbows, and three times for the soffets			
Planed circular soffets of inch deal veneered, per foot superficial, in two pannels - - - - -	0	5	9



	L	s.	D.
Whole deal do. do. - - - - -	0	6	3
N. B. To all splay'd soffets add per foot superficial -	0	0	3
To all circular framed splayed soffets, allow treble measure do.			
To all circular splayed soffets, in a circular wall, four times do.			
$\frac{1}{2}$ inch do. with canvas glued at the back, do. - - -	0	2	3
Cappings to elbows, each - - - - -	0	0	6
Do. to backs, per foot run - - - - -	0	0	2
If beaded add on every edge alone - - - - -	0	0	0 $\frac{1}{2}$
Splayed backs and elbows add per foot superficial....	0	0	1 $\frac{1}{2}$

### FRAMED GROUNDS,

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Three quarters of an inch deal - - - - -	0	0	10
Inch framed grounds, do. - - - - -	0	0	10 $\frac{1}{2}$
Whole deal, do. - - - - -	0	0	11 $\frac{1}{2}$
Do. mitred - - - - -	0	1	1
Inch and half do. - - - - -	0	1	2
Inch skeleton grounds for pilasters - - - - -	0	0	8
Whole deal do. - - - - -	0	0	10
Inch and half ditto - - - - -	0	1	0
Do. if back rebated - - - - -	0	1	1
Whole deal, head only circular, on plan flat sweep -	0	2	1
Do. $\frac{1}{2}$ inch to foot - - - - -	0	2	5
Do. $\frac{1}{2}$ inch do. - - - - -	0	2	9
Cemi circular head - - - - -	0	2	11
If inch and half deal grounds, add per foot super. -	0	0	2

### STAIRS, STEP, RISER, AND CARRIAGE,

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Inch white deal step, riser, and carriage - - - - -	0	1	7
Inch yellow deal steps, risers, and carriage to stairs, do. -	0	1	8
Whole deal common steps, risers, and carriage to do. -	0	1	10
Do. moulded and glued - - - - -	0	2	1
Do. dove-tail for balluster - - - - -	0	2	3
Do. geometrical - - - - -	0	2	4
Do. winders with one circular end - - - - -	0	2	8
Do. to circular bridge board - - - - -	0	3	0
If tongued the top and bottom edge - - - - -	0	3	2
If cleaned deal add - - - - -	0	0	8
Extra for quarter curtain glued upright - - - - -	0	4	0
Do. block and veneer - - - - -	0	7	0
Do. roper curtain step and riser - - - - -	1	0	0
Returned moulded nosings, each - - - - -	0	0	10
Do. plowed and tongued - - - - -	0	1	1
All joints of steps feather tongued, add per foot superficial	0	0	2

L. S. D.

Whole deal step, riser and carriage to geometry stairs, moulding nosings, and returns, risers, mitred to string board, per foot superficial - - - - -	0	2	4
Do. with second best deal - - - - -	0	2	8
Do. with clean do. - - - - -	0	3	0
Inch and quarter wainscot steps, with moulded nosings and risers, and fir 4 by 5 carriage - - - - -	0	3	8
Inch $\frac{1}{2}$ right wainscot steps and risers, with moulded fronts, fir 4 by 5 carriage, strings included - - -	0	4	3
Do. on a circular plan - - - - -	0	5	6
If with framed carriages, at 6d. per foot on the step extra			

## STRING BOARDS,

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Whole deal plain string board, rebated and beaded ....	0	1	2
Do. sunk .....	0	1	3
Do. sunk and moulded .....	0	1	4
Do. do. and cut .....	0	1	6
Do. do. and mitred to risers .....	0	1	6
Level, circular on plan, glued upright .....	0	2	5
Do. sunk face .....	0	2	9
Wreathed and glued uprights .....	0	6	0
Do. sunk face .....	0	6	6
Do. moulding bent in .....	0	7	0
Do. plain face, in four thicknesses .....	0	7	3
Do. do. sunk face .....	0	8	3
Do. do. and moulding bent in .....	0	8	6
N. B. For every inch less than a 12 inch opening, add per foot run .....	0	0	4
Circular moulded nosing .....	0	1	6
Cut brackets .....	0	2	0
Housings to steps and risers, each .....	0	1	0
Do. circular .....	0	1	6
Extra sinkings in hand rail, for an iron rail, per foot run .....	0	0	4
Do. circular ramped, or wreathed .....	0	0	9
Half rails to be paid for as three quarters. Cylinders to be charged extra.			

## DEAL HAND-RAILS AND BALLUSTERS TO STAIRS,

AT PER FOOT RUNNING, ALL MATERIALS

Straight moulded deal hand-rail, do .....	0	1	2
Do. sunk for ballusters .....	0	1	3
Ramped and kneed do .....	0	3	6
Circular hand-rail, level .....	0	3	9
Do. quick curve .....	0	5	3

	L.	S.	D.
Twist and ramped do. or solid wreathed .....	0	10	0
Deal turned and mitred caps.....	0	2	6

N. B There is more trouble in the workmanship to a circular and wreathed rail in deal than in mahogany.

### MAHOGANY HAND-RAILS AND BALLUSTERS, &c. TO STAIR

AT PER FOOT RUNNING, ALL MATERIALS.

Straight moulded hand-rail .....	0	4	0
Do. ramped, or level circular .....	0	10	6
Do. quick curve, or swan neck .....	0	11	6
Do. solid wreathed .....	1	1	0
Do. and under 12 inches .....	1	3	0
Scroll, or twist to curtail .....	1	2	0
Do. wreathed in thicknesses .....	1	5	0
Do. and under twelve inch opening .....	1	10	0
Each joint screw .....	0	2	6
Do. cap to rail, worked by hand .....	0	3	6
Square bar ballusters, per foot run .....	0	0	2 $\frac{1}{2}$
Do. and dove-tailed .....	0	0	3 $\frac{1}{2}$
Do if wainscot.....	0	0	5
Planceer, both edges rounded .....	0	0	4
Do. and both edges moulded.....	0	0	5
Square framed newell .....	0	0	8
Single turnings to do.....	0	1	0
Double do. do. ....	0	1	6
Fixing iron ballusters, each .....	0	2	0
Mahogany turned and mitred caps .....	0	3	6

All cylinders to be charged extra.

All half rails are equal to three quarters.

N. B. Circular or ramp-work is allowed three times the price of plain work, and twisted work four times; and this must be observed of all circular ramp, or twisted work in general, but a real value cannot be put on without inspection when finished.

Wreathed rails under twelve inches opening, and. under six inches opening, must be valued accordingly

### COLUMNS AND PLAISTERS,

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Whole deal diminished columns, glued and blocked, not exceeding 14 inches diameter .....	0	2	10
From 14 inches to 10 inches do .....	0	3	2
Do. under 10 inches do.....	0	3	6
Plain 1 $\frac{1}{2}$ deal pilasters, glued and blocked .....	0	1	4
Do. diminished .....	2	1	8

	£	s.	d.
Fluting to diminished columns, per foot run .....	0	0	3
Do. to pilasters do .....	0	0	2½
Heading to fluting .....	0	0	4
Caps and bases glued as columns .....	0	4	6
Do. in thicknesses .....	0	5	6
Neckings grooved to columns each, under and to 10 inches diameter .....	0	2	6
Do. to do, under 14 inches do .....	0	3	6

## WATER CLOSETS,

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Whole deal seat, riser and bearer .....	0	1	3
Mahogany do .....	0	4	0
Framed top and clamp flap, &c. ....	0	4	6
¾ mahogany square skirting .....	0	3	0
Framed bearers, per foot run .....	0	0	8
Holes, cutting each .....	0	2	6
For pull, bead included .....	0	2	0

## BRACKETING AND CRADLING,

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Whole deal cradling straight to entablature, do .....	0	1	0
Two inch do .....	0	1	6
Circular do. flat sweep .....	0	1	4
Circular do. two inch do .....	0	2	0
Do. end only .....	0	2	4
Bracketing to cornices of whole deal .....	0	1	8
Do. of half inch deal .....	0	1	1
Do. to groins in passages, four feet wide .....	0	1	7
Do. do. smaller do .....	0	1	10
Inch and half deal bracketing to domes, spandrels, heads of niches, &c. ....	0	2	3
Plugging to, walls included.			

## CORNICES,

AT PER FOOT RUNNING, ALL MATERIALS.

Run of single cornice, do - - - - -	0	0	7
Three quarter of inch fascia and cornice - - - - -	0	0	9
Do. plugged to walls, do - - - - -	0	0	10
Inch fascia and cornice, do - - - - -	0	0	10
Do. plugged to walls, do - - - - -	0	0	11

N. B. The aforesaid prices are sufficient for any large  
mouldings wrought by plane.

MOULDINGS,

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

	£	s	d.
Level, straight mouldings, struck by hand, of yellow deal, do.	-	-	0 1 8
Do. raking to pediments	-	-	0 1 11
Do. if many breaks and angles, do	-	-	0 2 6
Base, surbase, and architrave mouldings	-	-	0 1 8
Quirked do	-	-	0 1 10
Circular heads to cornices	-	-	0 4 6
Do. circular, flat sweep	-	-	0 2 9
Do. circular, do. quick sweep half inch to a ft.	-	-	0 3 6
Moulding, straight to caps and bases of columns, do	-	-	0 2 0
Housings to mouldings, each	-	-	0 0 6

RUNNING ARTICLES,

AT PER FOOT, ALL MATERIALS.

Rough fillets of deal	-	-	-	0	0	1
Wrought do.	-	-	-	0	0	2
Circular wrought do	-	-	-	0	0	3
Deal stops	-	-	-	0	0	2
Mitred do. wide	-	-	-	0	0	3
Deal beads	-	-	-	0	0	2
Circular do	-	-	-	0	0	3
Rebated angle staff	-	-	-	0	0	7
Do. circular	-	-	-	0	0	9
OG	-	-	-	0	0	3
Do. OG circular	-	-	-	0	0	6
Quirk OG, or ovolo bead	.....	.....	.....	0	0	4
Cove and bead	.....	.....	.....	0	0	3
Beaded capping	.....	.....	.....	0	0	2½
Astragal mitred in pannels	.....	.....	.....	0	0	4
Two reeds mitred, or astragal on doors, &c.	.....	.....	.....	0	0	4
Three do. do. on shutters or doors	.....	.....	.....	0	0	4½
Narrow grounds to skirtings	.....	.....	.....	0	0	3
Do. grooved do.	.....	.....	.....	0	0	3½
Rounded mitred stops	.....	.....	.....	0	0	2½
Do. moulded	.....	.....	.....	0	0	3½
Double beaded chair rail	.....	.....	.....	0	0	4
Framed legs, rails, and runners	.....	.....	.....	0	0	6
Housings to mouldings, each to 4 inches	.....	.....	.....	0	0	3
If circular, double price allowed.						
Small grooves or small sinkings	.....	.....	.....	0	0	1½
Do. large	.....	.....	.....	0	0	2
Rule joint	.....	.....	.....	0	0	6

	L.	S.	D.
Large do. ....	0	0	7
Plain dentals ....	0	0	6
Fancy do. ....	0	0	8

## DRESSERS.

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Inch and half deal dresser top, planed two sides .....	0	1	1
Do. with bearers and turned columns, do. ....	0	1	7
Two inch do. dresser top, wrought both sides, do. ....	0	1	4
Do. with bearers and turned columns, do. ....	0	1	11
Do. dove-tailed and keyed, do. ....	0	2	3
Do. and moulded front and end, do. ....	0	2	3
Two and half inch dresser top, of do. do. ....	0	1	8
Do. with bearers and turned columns, do. ....	0	2	3
Three inch dresser top of do. and bearers do. ....	0	2	9
Do. and wrought both sides, do. ....	0	2	9
Whole deal pot board and bearers. ....	0	1	0

## DEAL DRAWERS, DOVE-TAILED.

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Half inch or slit deal drawers, do. do. ....	0	0	9
Three quarters of inch deal do. at do. ....	0	0	11
Inch do. ....	0	1	0 $\frac{1}{2}$
Whole deal do. ....	0	1	2
Inch and half do. ....	0	1	4
Slit deal bottoms, 2 sides planed .....	0	0	7
Whole deal dove-tailed fronts, do. ....	0	1	2
Three quarter inch bottoms .....	0	0	9

## SLIDERS AND RUNNERS TO DRAWERS.

AT PER FOOT RUNNING MEASURE, ALL MATERIALS.

Deal two inch and half framed, and beaded legs .....	0	0	7
Wainscot inch and half do. runners .....	0	0	6
Do. half inch sliders, do. ....	0	0	3 $\frac{1}{2}$
Do. inch do. ....	0	0	4 $\frac{1}{2}$
Do of deal do. ....	0	0	3
Turning dresser legs, each. ....	0	1	0

## SHELVES.

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Three quarter deal shelves .....	0	0	8 $\frac{1}{2}$
Do. sunk do. and cut standard, do. ....	0	0	11
Three quarter deal shelves, edged scolloped, or moulded do. ....	0	0	10

	£	s.	d.
Inch deal and square edges, do.....	0	0	9½
Do. and sunk do. shelves, do.....	0	0	11
Do. and moulded or scalloped edges, do. ....	0	1	0
Whole deal square edges shelves, do.....	0	0	10½
Do. sunk do. and cut standard, do. ....	0	1	1
Do. and moulded or scalloped, do. or astragal edge ....	0	1	2
Inch and half deal shelves, square edges, do. ....	0	1	1
Do. sunk do. and cut standard, do. ....	0	1	3
Do. and moulded, or scalloped, or edges astragal, do...	0	1	4
Brackets cut of half inch deal, each.....	0	0	6
Do. of inch and half, do. ....	0	1	6

### COUNTERS AND COUNTER FRONTS

AT PER FOOT SUPERFICIAL, ALL MATERIALS.

Inch deal square counter front.....	0	0	11
Whole deal do. ....	0	1	0
Do. with ovolob, or OG .....	0	1	2
Do with quirk do. square back .....	0	1	3
Inch and half do. ....	0	1	5
Inch wainscot counter top.....	0	2	3
Do. mahogany .....	0	3	10
Clamps, each.....	0	1	8
Morticed do. ....	0	2	6
Do. and mitred .....	0	3	2
Extra for flap or flaps, if any .....	0	2	6
Do. grooved and tongued heading joints .....	0	1	6
Circular edge cut, per foot run.....	0	0	6
Circular flat sweep once, and half strait..			
¼ inch double, and ½ inch 2½ strait.			

### STABLE RACKS AND MANGERS:

AT PER FOOT RUNNING, ALL MATERIALS.

Mangers, with racks and oak stalls, rails, &c. complete, do.....	1	2	0
Three inch and half by two and half oak, top wrought rounded and spiked, do.....	0	1	10
Circular 1½ inch, per foot run .....	0	0	11
Do. of 1½ inch deal .....	0	1	0
Seed racks or bars.....	0	0	3
Inch and half rough oak litter board, ten inches wide, do. the edge rounded .....	0	1	4
Turned rack staves of two inch deal, do. each .....	0	1	3
Inch and half deal harness pins framed, per foot, run ..	0	0	9
Harness pins of oak, fourteen inch long per foot, run ..	0	1	9

## COUNTRY WORK.

PER SQUARE, ALL SUPERFICIAL.

L. S. D.

Barn floors laid with two inch oak plank, clear of sap, per square, 7l. 0s. 0d. to .....	9	0	0
Do. with two inch yellow deal, clear of sap, per square, 5l. 5s. to .....	6	4	0
Oak joice per foot, cube and labour .....	7s. 0d. to	0	8 6
And laid not more than one foot apart.			
It is unnecessary to set down the price of joice per square, as they may be of various scantlings, for which reason cubing them is best.			
Common five bar gate of oak is generally each from 1l. to .....	1	3	0
Five bar gates of oak, with sawing included, each .....	1	5	0
Oak joist, new to barn floors, one foot apart, to one foot four inches, at per foot cube .....	0	6	0 to 0 7 6
Two inch oak plank listed clear of sap, to barn floors all materials, per square .....	7	0	0 to 9 10 0

## CEDAR.

AT PER FOOT SUPERFICIAL.

Inch and half cedar seats to water closet .....	0	4	0
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## THE PRICES OF RIGHT DUTCH WAINSCOT.

AT PER FOOT SUPERFICIAL, LABOUR AND NAILS INCLUDED.

Half inch do. rough .....	0	0	11
Do. planed on both sides, and dove-tailed do. ....	0	1	5
Three quarter inch rough .....	0	1	3
Do. planed on one side, do. ....	0	1	5
Inch do. rough .....	0	1	7
Do. planed both sides, do. ....	0	2	0
Do. and dove-tailed do. ....	0	2	4
Inch and quarter do. planed on one side .....	0	2	5
Do. and planed both sides, do. ....	0	2	7
Do. and do. and clamped or framed, do. ....	0	2	9
N. B. It is now 1s. 0d. per foot super, in the timber-yard, ready money, rough, and the price varies according to thickness.			

## THE PRICES OF RIGHT JAMAICA MAHOGANY.

AT PER FOOT SUPERFICIAL, LABOUR AND MATERIALS.

Half inch do. glued in shelves, with slides do. . . . .	0	2	0
Do. in plinths . . . . .	0	2	3

	L.	S.	D.
Three quarter inch do. . . . .	0	2	9
Do. in shelves or drawers . . . . .	0	2	11
Glued do. to fronts of linings, do. . . . .	0	3	3
Inch do. to shelves, &c. do. . . . .	0	3	7
Do. planed side board, do. . . . .	0	3	10
Clamped and mitred, do. . . . .	0	4	4
Do. inch and quarter, in shelves do. . . . .	0	4	1
Do. in seats and bearers, do. . . . .	0	4	4

The price and quality of mahogany is so fluctuating and various, that no real price can be fixed but according to its goodness; and the different kinds of work performed, the few above articles is a small specimen, as well as that of the wainscot.

# MASTER CARPENTER'S AND JOINER'S PRICES BY DAY WORK.

	L.	S.	D.
A carpenter or joiner per day . . . . .	0	6	0
Do. for every single hour of do. working . . . . .	0	0	7½
Oak timber, 9 to 12 feet long, and 6 to 12 inches square per foot cube . . . . .	6s. 6d. to	0	9 0
Do. sawed die square, and free from sap . . . . .	0	7	6
N.B. Oak timber increases in value as it gets larger.			
Sound old oak, at per foot cube, . . . . .	0	4	0
Dantzic timber, do. . . . .	0	3	11
Riga do. . . . .	0	3	11
Fir timber of Memel, per foot cube . . . . .	0	3	10
Brewick and other Norway fir timber, do. . . . .	to	0	3 9
Sound old fir, do. . . . .	0	3	0
New fir used for shoring, &c. for use only, charged one third . . . . .	0	3	9
Elm per foot cube . . . . .	0	3	9
N.B. The table in page 127 informs the price of deals and and battens, according to their different lengths and thickness, at the present price.			
Common red and white sash lines per yard . . . . .	0	0	3
Best white do. . . . .	0	0	4
Patent do. . . . .	0	0	6
Box pullies and pins, small size, each . . . . .	0	0	3
Two inch do. do. . . . .	0	0	4
Wainscot boxed pullies do. . . . .	0	0	7
Iron, cased do. . . . .	0	0	9

	L.	S.	D.
Brass do.....	0	1	3
Glue, per pound .....	0	1	6
Pitch, do. ....	0	0	6
Spikes, hold-fasts, and wall-hooks, do.....	0	0	7
Lead sash weights, do.....	0	0	6
Cast iron do. do.....	0	0	3

## WAINSCOT, CLEAN AND SECOND BEST DEAL,

AT PER FOOT SUPERFICIAL.

	Wainscot 1819.		Clean Deal 1821.		2d. Deal 1821.
	s.	d.	s.	d.	s. d.
$\frac{3}{4}$ inch per foot super.....	1	1	0	8 $\frac{1}{2}$	6
1 inch do. ....	1	4	0	10 $\frac{1}{2}$	8
1 $\frac{1}{2}$ inch do. ....	1	8	1	0	9 $\frac{1}{2}$
1 $\frac{1}{2}$ inch do.....	1	11	1	2 $\frac{1}{2}$	11 $\frac{1}{2}$
2 inch .....	2	7	1	6	1 2 $\frac{1}{2}$
2 $\frac{1}{2}$ inch.....	3	3	1	9	1 5
3 inch .....	3	11	2	0	1 7

## FLOORING BOARDS PREPARED FOR LAYING.

MATERIALS AND LABOUR EACH.

	L.	S.	D.
Inch 10 feet rebated to thickness .....	0	4	0
Do. 12 feet do. ....	0	4	11
Do. 14 feet do. ....	0	5	8
Whole deal 10 feet do. ....	0	5	0
Do. 12 feet do. ....	0	6	0
Do. 14 feet do. ....	0	7	0

## BATTENS, Do.

Inch 10 feet rebated to thickness .....	0	3	5
Do. 12 feet do. ....	0	4	1
Do. 14 feet do. ....	0	4	9
Inch and quarter 10 feet do.....	0	4	0
Do. 12 feet do. ....	0	4	9
Do. 14 feet do. ....	0	5	7

## SAWYER'S PRICES.

Twenty feet plank of 10 $\frac{1}{2}$ to 11 inches wide, per dozen cuts	0	7	6
Eighteen feet do. per do. ....	0	6	6
Eighteen feet 3 inches Petersburg plank 10 $\frac{1}{2}$ and 11 inches wide, per single cut.....	0	0	8
Sixteen feet do. per dozen cuts.....	0	5	9

# SAWYER'S PRICES.

99

Fourteen feet do. per do. ....	0	5	0
Twelve feet deals, per dozen cuts.....	0	3	6
Ten feet do.....	0	3	0
Twelve feet battens do.....	0	2	6
Ten feet do. ....	0	2	3
Half deals one farthing per foot run, or do.....	0	2	0
Fir timber cut at per load of 50 feet cube .....	0	7	6
Extra cuts in do. per hundred feet superficial .....	0	3	0
Oak timber cut at per load of 30 feet cube .....	0	8	0
Elm do. at per do. ....	0	6	0
Ash do. per load of 45 feet cube.....	0	8	0
A sack of saw-dust.....	0	1	9
Aris or bevil cuts, double price.			
Cross cut on timber, each.....	0	0	4
One cut up baulk or upher, per 100 ft. ....	0	7	6
2 cuts quartering do. ....	0	6	0
Sabbling do. ....	0	6	0
3 and 4 inch plank do. ....	0	4	9
1½ to 3 inch do. ....	0	4	0
Boards less than 15 inches deep .....	0	3	6
Do. above 15 do. ....	0	4	0
Scantlings 3 by 3½ or under.....	0	3	6
Do. 8 by 4 to 3 by 3½ .....	0	4	0
Do. above 8 by 4 .....	0	4	9
Machinery cut out of baulk .....	0	4	0
Cross cuts each .....	0	0	3

## DEALS BY THE 100 FEET.

One cut up deals .....	0	0	3
Two cuts to under eight.....	0	3	2
Eight cuts and upwards.....	0	4	6
American deals under 20 inches deep .....	0	3	3
Do. 20 inches deep and upwards.....	0	4	0
Deal ends under 7 feet long .....	0	4	0
Dry deals .....	0	4	0
Scaffold do. ....	0	4	9
Flat cuts under 12 feet long .....	0	0	1½
Do. 12 to 16 do. ....	0	0	1¾
Do. 16 and upwards .....	0	0	2
Deals when deep cut and then flat, extra .....	0	0	1
Aris and bevil cuts double price.			

## PRICES FOR COUNTRY WORK, SAWING PER 100 FEET.

Oak into plank or boards .....	0	4	0
Out of American timber .....	0	3	4
Out of English timber .....	0	3	6
Cooper's staves per dozen .....	0	1	6
Short do. ....	0	1	2
Chair backs .....	0	0	10
Hornbeam, crab, apple, pear, plumb, or cherry tree, per 100 feet.....	0	8	0

## HARD MAHOGANY.

	L.	S.	D.
Under two feet deep per 100 feet .....	0	7	0
Do. if two feet and under thirty inches do. ....	0	7	6
Do. thirty inches deep up to three feet.....	0	11	0

## HONDURAS BAY WOOD.

Under two feet deep per 100 feet .....	0	6	0
Do. two feet to thirty inches deep .....	0	7	0
Do. thirty inches to and under three feet .....	0	9	6
Do. three feet deep and upwards .....	0	11	6

## VENEERS.

Mahogany veneers under 18 inches deep per 100 feet ..	0	9	6
Do. 18 inches deep to 22 inches do. ....	0	11	6
Do. above 2 feet to 30 inches deep do .....	0	13	6
All curls under 18 inches per foot .....	0	0	1
Do. above 18 inches do. ....	0	0	2
Rose, tulip, ring, purple, and satinwood do. ....	0	0	2
Holly veneer .....	0	0	1½
Chair bannister less than 10 inches do. ....	0	0	2
Chair backs, per dozen .....	0	0	9
Table feet, do: .....	0	0	9
Sofa rails, sweep or commode, each ...	0	0	6
Do. sweep or commode fronts, 9 inches deep or under do.	0	0	7
Over measure, per inch .....	0	0	1½
Cedar, per 100 feet .....	0	4	6
English oak canted into coopers staves, do. ....	0	8	0
Beech plank into boards, per foot ..	0	0	1
Bed posts 7 feet long and above, per pair .....	0	0	9
Opening logs under 2 feet, per foot .....	0	0	1
Do. 2 feet und under 30 inches, do. ....	0	0	1
Tent bed-posts, per pair .....	0	0	6
Beech billets, per score .....	0	1	0
Slitting mahogany plank under 18 inches, per foot ....	0	0	1
Do. 18 inches and upwards .....	0	0	1½

## ENGLISH TIMBER.

Oak scantlings 4 by 3 and less, per 100 feet .....	0	5	9
Do. above 4 by 3 and under 12 inches square .....	0	7	9
Do. 12 inches square and under 18 inches do. ....	0	11	0
Do. 18 inches square and upwards do. ....	0	15	0
Old oak scantling .....	0	6	6
Oak, ash, beech, and sycamore, in boards, under twenty inches .....	0	6	0

# JOURNEYMEN CARPENTERS AND JOINERS PRICES OF TASK WORK LABOUR ONLY

BY ADMEASUREMENT.

## FRAMED NAKED FLOORS,

PER SQUARE OF 100 FEET.

	S.	D.	Fixed.
Framed ceiling floor, with binding and cieling joice, per square.....	6	0	
Do. with ceiling joice only .....	3	6	
Single framed floors, trimmed to chimneys and well holes .....	7	0	
Do. if joice above 9 inches in depth, extra.....	1	0	
Do. if trimmed to party walls .....	7	6	
Do. if one girder.....	9	6	
Framed floors with girders, binding, bridging and cieling joice .....	17	6	
Ground joice bedded, not framed, per square....	3	0	
Do. pinned down on plates, and framed to chimneys.....	5	6	
Trusses put into girders 4 inches by 4 inches, per foot run .....	1	0	
Kings each .....	3	6	
Queens and wedges .....	3	0	
Letting in screw bolts and plates into girders..	0	6	
Girders sawed, reversed, and bolted, per foot run .....	0	4	
Furrings to under side of girders per foot super..	0	1½	

## ROOFING.

Common shed roofing, not more than 12 feet high, plates, including.....	4	6	
Do. two stories .....	4	9	
Do. three do. ....	5	3	
Do. with parloins .....	5	0	
Do. two stories .....	5	0	
Do. three do. ....	6	0	
Single span roofs, plates, and ridges included..	5	6	
Do. two stories .....	5	10	
Do. three do. ....	6	3	
Do. with parloins .....	6	3	
Do. two stories .....	6	7	
Do. three do. ....	7	0	
Hyps and valleys per foot run .....	0	5	
Kirb roofing, kirb and pole plates included, extra per square .....	1	0	
Girth, roofing, principals, collar, beams, and parloins framed, the plates included .....	13	0	
Framed principals with beams, king posts, parloins braces, and common rafters, plates including..	17	0	

	Fixed.	
	s.	d.
Do. with king and queen posts .....	20	0
Hyps and valleys per foot run .....	0	7
Diagonal and dragon pieces, angular ties and struts, as fir framed .....		
If any of the above are on irregular plans to be paid for accordingly.		
All iron work to roofs per pound .....	0	1
Screw bolts each .....	0	6
Hanging do. do. ....	1	6
Rafter's feet, per foot run .....	0	3
Eves board, do. ....	0	1
Three inch ridge roll, rounded .....	0	3
Aris fillet for slates, do. ....	0	1

## GUTTERING,

PER FOOT UPERFICIAL.

Deal inch, or $1\frac{1}{2}$ and bearers .....	0	$3\frac{1}{2}$
Do. to kirb roofs .....	0	$4\frac{1}{2}$
Inch rough trough .....	0	2
Do. plained .....	0	$3\frac{1}{2}$
Whole deal planed trough pitched .....	0	4
Do. fillet gutter, pitched .....	0	$3\frac{1}{2}$
Do. aris gutter, do. ....	0	$3\frac{1}{2}$

## QUARTER PARTITIONS.

PER SQUARE.

Common 4-inch .....	5	0
Do. circular on plan .....	6	6
Do. 5-inch do. ....	5	9
Do. circular on plan .....	7	0
Do. 6-inch do. ....	6	6
Truss framed with king post .....	8	6
Do. with king and queen posts .....	10	6
Fir in bond lintels, per foot cube .....	0	$4\frac{1}{2}$
Do. rough framed in naked floors, roofs and partitions, &c. ....	0	$7\frac{1}{2}$
Planing, fir squaring included, per foot superficial .....	0	1
Sunk rabbetts up to 2 inches, by $\frac{3}{4}$ inch per foot run .....	0	$0\frac{1}{2}$
Do. 3 inches by inch and quarter .....	0	1
Do. bead to $\frac{3}{4}$ inch, single .....	0	$0\frac{1}{2}$
Do. above $\frac{3}{4}$ inch to $1\frac{1}{4}$ inch .....	0	$0\frac{1}{2}$
N.B. Where any of the aforesaid labour in floors, roofs, or quarter partitions, are of oak, add rather more than one-fourth to the above prices.		
If beads are re-turned they are double price.		

From  
the  
Bench

Proper door cases up to 25 feet superficial on the face, oak cills included, per foot super .....	0	$1\frac{1}{2}$	0	2
Proper two-light window frames .....	0	$2\frac{1}{2}$	0	3

	From the Bench.	Fixed. S. D.
Fixing the above in new work each .....	....	0 6
Do. with circular heads .....	....	0 9
Door cases and window frames with circular heads, glued up in two thicknesses, and bead- ed, per foot run .....	1 0	1 3
Do. if elliptic, or gothic .....	1 3	1 6

### WATER TRUNKS,

PITCHED OR PUT TOGETHER WITH WHITE LEAD  
AND OIL, PER FOOT RUN,

Inch deal $4\frac{1}{2}$ water trunk, do. ....	0 3	0 $3\frac{1}{2}$
Inch and quarter, 5 inch do. do. ....	0 $3\frac{1}{2}$	0 $4\frac{1}{2}$
Do. 6 inches square do. ....	0 4	0 5
Do. if ploughed and tongued, do. ....	0 $5\frac{1}{2}$	0 $6\frac{1}{2}$
Shoe to do. ....	0 8	..
Hopper head, or moulded cap to do. ....	1 0	.
If scaffold to for fixing, to be charged separate, as also brackets and holdfasts.		

### FURRINGS OR BATTENINGS,

PROPERLY BACKED PER SQUARE.

$\frac{3}{4}$ of inch to $1\frac{1}{2}$ of inch .....	3 0
If to ceilings, add per square .....	1 0
If done with quarter, 3 by 2 inches. ....	3 6
If with plugs, add per square .....	0 9
If with $2\frac{1}{2}$ of 3 inch deal .....	4 3

### BRACKETTING,

PLUGGING INCLUDED, PER FOOT SUPER.

Common and cove cornice .....	0 4
Circular do. ....	0 4
Groins in passages above 4 feet wide ....	0 7
Do. do. in smaller do. ....	0 10
$1\frac{1}{4}$ spherical bracketting in domes, spandrels, or heads of niches .....	1 0

### BOARDING FOR SLATING OR LEAD,

PER SQUARE SUPERFICIAL,

$\frac{1}{2}$ inch to $1\frac{1}{2}$ inch rough edges shot .....	4 0
Inch and half do. do and sprung. ....	5 3

### ROUGH BOARDING,

PER SQUARE.

$\frac{3}{4}$ and inch deal. ....	3 0
Do. and edges shot. ....	3 9
Do. plowed and tongued .....	5 9
$1\frac{1}{4}$ inch and $1\frac{1}{2}$ deal do. add extra .....	0 9

CENTERING,  
PER SQUARE SUPERFICIAL.

	From the Bench.	Fixed.	
	S. D.	S.	D.
Common centreing to vaults.....		7	0
Do. to groins .....		15	0
Do. to trimmers, bridgeways, &c. per foot super- ficial.....		0	2½
Do. to apertures, as gauged arches and struts, per foot run .....		0	2
Do. and circular heads.....		0	4
Do. if more than 4 inches soffit per foot super. ....		0	7
Circular heads, rough do.....		0	5
Do. elliptical do. do. ....		0	6
<i>All arches if 9 inch soffits the centre, are allowed 2 inches</i>			

SLIT AND THREE QUARTER INCH  
DEAL,

AT PER FOOT SUPER.

Rough.....	0	0½
Do. and bearers.....	0	1
Do. and edges shot .....	0	1
Do. ploughed and tongued .....	0	2
Planed on one side.....	0	2
Do. grooved, tongued, and beaded .....	0	3
Do. cover and bearers to door and chimney caps or torus plinth .....	0	3½
Do. rebated, or beaded, or ledged.....	0	3
Planed two sides and dove-tailed in drawers, re- batted or grooved .....	0	4½
Do. in small drawers.....	0	5
Do. scalloped, or cut circular.....	0	4

INCH AND INCH AND QUARTER  
DEAL,

PER FOOT SUPERFICIAL.

ough.....	0	1
Do. and bearers, or edges shot .....	0	1½
Planed on one side .....	0	2½
Do. ploughed and tongued, rebated, or beaded..	0	3
Do. cut circular, or scalloped .....	0	4½
Do. rebated, beaded, and ledged.....	0	4
Planed on both sides.....	0	2
Do. framed, keyed, or clamped .....	0	3
Do. do. morticed, or dove-tailed .....	0	4
Do. do. to drawer from 18 inches or more .....	0	5
Do. sunk shelves, or moulded edge.....	0	6
Cuttings to standards, each cut .....	0	4
Housings.....	0	2
	0	2½

INCH AND HALF, AND TWO INCH  
DEAL,

AT PER FOOT SUPERFICIAL.

	From the Bench.		Fixed.	
	S.	D.	S.	D.
Rough.....			0	1
Do. and edges shot.....			0	1½
Do. and bearers, or ploughed and tongued.....			0	2½
Planed on one side.....	0	1¼	0	2¾
Do. on both sides.....	0	2½	0	3½
Do. ploughed and tongued.....	0	3½	0	4½
o. framed and clamped, or morticed and clamp- ed, or cut circular.....	0	4½	0	5½
Do. do. and dove-tailed.....	0	5½	0	6½
Extra to feather tongued.....	0	0¾		

TWO AND A HALF, AND THREE  
INCH DEAL,

PER FOOT SUPERFICIAL.

Rough.....	0	1½
Edges shot.....	0	2¼
Ploughed and tongued.....	0	3¼
Planed one side.....	0	2
Do. on two sides.....	0	2¾
Do. rebatted and beaded, ploughed and tongued.....	0	4½
Extra to feather tongued.....	0	1
If beaded or reeded, add per foot.....	0	0½

DRESSERS OF DEAL,

AT PER FOOT SUPERFICIAL.

Inch and half dresser to, planned 2 sides.....	0	2½	0
Two inch do. do.....	0	2½	0
Two and a half do. do.....	0	3½	0
Three inch do. do.....	0	3½	0
Inch or inch and quarter, put boards and bearers.....	0	2	0

SOUNDING BOARDS,

PER SQUARE.

Slit deals, with fillets included.....	5	0
Three quarter and inch, and single fillets.....	5	6
Ditto do. with double do.....	6	6
If herring bone add, extra.....	1	4

WEATHER BOARDING,

PER SQUARE.

Rough with boards.....	3	0
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	From the Bench.		Fixed.	
	S.	D.	S.	D.
Do. and edges sprung .....			4	0
Planed do. ....			6	0
Rough with battens .....			4	0
planed do. ....			7	0
If done in fences, deduct per square .....			1	0

## SHELVES,

## PER FOOT SUPERFICIAL.

$\frac{3}{4}$ inch, and inch and $\frac{1}{2}$ deal shelves .....			0	3
Do. astragal edge .....	0	$2\frac{1}{2}$	0	$3\frac{1}{2}$
Do. sunk shelves and cut standard .....	0	3	0	$4\frac{1}{2}$
One and a half inch shelves .....	0	$2\frac{1}{2}$	0	$3\frac{1}{4}$
Do. astragal edges .....	0	$2\frac{1}{2}$	0	$3\frac{1}{2}$
Do sunk shelves and cut standard .....	0	$3\frac{1}{4}$	0	$4\frac{1}{4}$
Grooves in book cases, per foot run .....			0	1
Inch, and inch and $\frac{1}{4}$ cut brackets, each .....			0	$3\frac{1}{2}$

## FLOORS,

## PER SQUARE.

Inch planed and folding .....	7	6
Do. straight joint .....	9	6
Whole deal planed folding .....	8	0
Do. strait joint .....	10	0
Do. do. and tongued headings .....	11	0
Do. do. and edge nailed .....	12	0
One and half inch rough folding floor .....	5	6
Do. do. ploughed and tongued .....	8	6
Planed do. folding .....	8	6
Do strait joint .....	11	0
Do. and tongued headings .....	12	0
Two inch rough folding, edges shot .....	7	0
Do. do. ploughed and tongued .....	10	0
Do. dowelled .....	17	0

## BATTEN FLOORS,

## PER SQUARE.

Inch and quarter common straight joint .....	13	0
Do. and tongued headings .....	16	6
Do. and dowelled .....	26	0
One and a quarter right wainscot dowelled floor .....	38	0
One and a half inch do. ....	42	0
The above floors to be gauged to a width, thicknesses, and the strait joint edge nailed.		

As this book has a great circulation in all counties in England, the Author has thought it necessary to insert the following prices of work usually done in the country:

Park paling per rod, 3 feet 6 inches high .....

# JOURNEYMEN'S TASK-WORK PRICES.

107

	From the Bench.		Fixed.	
	S.	D.	S.	D.
Do, and if cleave the pales, and if higher, in proportion .....	-		6	6
Two inch barn floor, oak, elm or beech, pinned and dowelled, sleepers included, per square .....	-		21	0
Framing to barns, stables, &c. per square .....	-		10	0
Do. with hewing and sawing to do. included, as is customary in some countries .....	-		17	0

## WATER CLOSETS.

### PER FOOT SUPERFICIAL.

Common or clean deal seat, riser and bearer .....	0	3	0	4
Inch white deal, clamped flaps and rails .....	0	3 $\frac{1}{2}$	0	5
Inch and quarter, or clean yellow, do. ....	0	4	0	5 $\frac{1}{2}$
Do. mitre clamped do. ....	0	4 $\frac{1}{2}$	0	6
Inch and half cedar seats to do .....	0	5	0	6
Mahogany seat and riser .....	0	7	0	8
Do. framed, top clamped, flap .....	0	11	1	0

## SKIRTINGS.

### PER FOOT SUPERFICIAL.

Plain, inch and three quarters square skirting, with backings and fillets complete .....	0	3		
Do. raking .....	0	4 $\frac{1}{4}$		
Torus do .....	0	2 $\frac{1}{2}$		
Raking torus .....	0	4 $\frac{3}{4}$		
Rebated plinth .....	0	3 $\frac{1}{2}$		
Raking do .....	0	4 $\frac{3}{4}$		
If do. plugged to walls, add .....	0	0 $\frac{1}{2}$		
If circular, add double the above prices.				
Add per foot for scribing to nosing of steps .....	0	0 $\frac{3}{4}$		
Do. to stone stairs .....	0	1		
Do. to moulded do .....	0	1 $\frac{1}{4}$		
Level circular plain plinth .....	0	6		
Raking do .....	0	10		
Level circular torus plinth .....	0	7		
Do. raking .....	0	11		
<i>If any of the above are backed or glued up in thicknesses double the price of the four last articles.</i>				
<i>All skirtings under 6 inches wide to be paid for at the rate of 7 inches.</i>				

## SASH FRAMES.

### PER FOOT SUPERFICIAL.

Deal cased frames for 1 $\frac{1}{2}$ or 2 inch sashes, oak sunk cills, prepared to hang double, with brass cased pullies .....	0	3	0	4
Do. circular heads to do. ....	0	10	0	11
Do. circular on plan quarter inch to foot .....	0	6	0	7

	From the Bench.		Fixed.	
	S.	D.	S.	D.
Do. do. half inch to foot.....	0	8	0	9
Do. circular circular heads.....	2	7	2	9
Deal cased frames, oak sunk cills, with wainscot or mahogany pulley pieces, and beads for 1½ inch sashes, prepared to hang double.....	0	5	0	6
Do. circular heads to do.....	1	0	1	2
Do. circular on plan quarter inch to foot.....	0	8	0	9
Do. do. half inch to foot.....	0	10	0	11
Do. circular circular.....	3	2	3	4
Frames as the last for 2 sashes, add extra, per foot	0	1	0	1
Deal venetian or paladian frames.....	0	5	0	6
Do. in wainscot or mahogany.....	0	7	0	8
Plain solid frames, oak sunk cills, weathered, throat- ed, rebated, and beaded, for French casements.....	0	4	0	5
If extra sinkings, heads, or tongues, add per foot run	0	0¼		

## FRENCH CASEMENTS,

AT PER FOOT SUPERFICIAL.

Two inch and two and a half inch ovolo do.....	0	5½	0	7
Do. wainscot or mahogany.....	0	7	0	8½

## SASHES.

AT PER FOOT SUPERFICIAL.

Inch and half deal ovolo sashes.....	0	2½	0	3½
Two inch and two and a half do.....	0	3½	0	4
Do. circular head.....	1	1	1	3
Do. do. two inch sashes.....	1	3	1	5
Do. circular on plan quarter inch to foot.....	0	5	0	7
Do. do. half inch do.....	0	8½	0	9
Do. circular circular.....	2	10	3	0
Two inch and two and a half wainscot ovolo.....	0	5	0	6
Do. and circular head.....	1	8	1	10
Do. circular on plan quarter inch to foot.....	0	8	0	9
Do. half inch to foot.....	0	10	0	11½
Do. circular circular.....	3	3	3	5
If mahogany add extra per foot.....	0	1	0	1
If astragal and hollow in deal add per foot super.....	0	0½	-	-
Do. do. in wainscot or mahogany.....	0	1	0	1

## SHOP FRONT SASHES.

AT PER FOOT SUPERFICIAL.

Two inch ovolo of deal.....	0	3½	0	4½
Do circular on plan flat sweep.....	0	5	0	6½
Do. do. quarter inch to foot.....	0	5½	0	7
Two inch wainscot ovolo.....	0	5	0	6
Do. astragal and hollow.....	0	6	0	7
Do. circular on plan flat sweep.....	0	8	0	9
Do. quarter inch to foot.....	0	9	0	10

	From the Bench.		Fixed.	
	S.	D.	S.	D.
Do. mahogany ovolo .....	0	6	0	7
Do. astragal and hollow .....	0	7	0	8
Do. circular on plan .....	0	9	0	10
Do. quarter inch to foot .....	0	10	0	11
Ovolo four light cant barrs, each .....	3	0	-	-
Astragal and hollow do. ....	3	6	-	-
Ovolo four light angle barrs .....	4	6	-	-
Astragal and hollow do. ....	5	6	-	-
Circular ends, four lights high, the radius of eight inches each .....	8	0	-	-
Do. if of wainscot .....	9	0	-	-
Do. if of mahogany .....	10	0	-	-

SASHES AND FRAMES.

AT PER FOOT SUPERFICIAL.

Deal-cased frames, oak sunk cills, with 1½ inch deal, ovolo sashes double hung .....	0	6	0	7½
Do. if paladian or Venetian frames .....	0	7	0	9
Do. frames, and two-inch sashes, double hung .....	0	7	0	8½
Do. with astragal and hollow sashes .....	0	7½	0	9
Do. circular heads to do .....	1	10	2	0
Do. circular on plan ¼ inch to foot .....	0	10	0	11½
Do. do. ½ inch to foot .....	1	1	1	2½
Do. circular circular .....	4	4	4	6
Deal-cased frames, oak sunk cills, wainscot or mahogany pulley pieces and beads, 2 inch wainscot ovolo sashes, double hung with brass pulleys .....	0	8	0	9½
Do. and astragal sashes .....	0	9	0	10½
Do. Venetian or paladian frames .....	0	10½	1	0
Do. and circular heads .....	2	3	2	5
Do. and circular on plan ¼ inch to foot .....	1	2	1	3½
Do. half inch do .....	1	4	1	6½
Do. circular circular .....	4	10	5	0
Frames with mahogany pulley pieces and beads, 2 inch or 2½ astragal, and hollow mahogany sashes and double hung .....	0	9½	0	11
Do. Venetian or paladian frames .....	1	0	1	1½
Do. and circular head .....	2	4	2	6
Do. and circular on plan ¼ inch to foot .....	1	3	1	4½
Do. and half inch do .....	1	6	1	7½
Do. if circular circular .....	5	0	5	2
All circular heads to be measured square from the springing.				

SKYLIGHT,

AT PER FOOT SUPERFICIAL.

Two inch deal ovolo .....	0	2½	0	3½
Do. on irregular plan .....	0	3	0	4
Do. hyp'd to square plan .....	0	5	0	6½
Do. do. do. to irregular do .....	0	6½	0	8

	From the Bench.		Fixed.	
	C.	D.	S.	D.
2½ inch deal ovolo do .....	0	3	0	4
Do. an irregular plan .....	0	4	0	5
Do. hyp'd to part square plan .....	0	6	0	7½
Do. do. do. to irregular do .....	0	7	0	9
If made of oak add per foot .....	0	1		

## BACK LININGS FRAMED.

## AT PER FOOT SUPERFICIAL.

Slit and ¾ deal linings, plowed, tongued, and beaded and plugged, or with small back linings .....	0	3½	0	5
Do. and fascia beaded on edges .....	0	3¾	0	5½
Each deal two pannel square .....	0	3½	0	5
Do. three pannel square .....	0	3½	0	5
Do. and four pannel do. ....	0	4½	0	6
Do. two pannel bead butt and square .....	0	4½	0	6
Do. three pannel do. ....	0	5	0	6½
Do. four pannel do. ....	0	6	0	7½
If splayed add to do. ....	...	...	0	0½

## BACKS ELBOWS, AND SOFFEETS,

## GROVED AND TONGUED, PER FOOT SUPERFICIAL.

Inch and quarter in deal plain keyed .....	0	3	0	4½
Do. one square framed backs, only .....	0	3½	0	5
Do. do. molded .....	0	4½	0	6
Do. and raised moldings .....	0	5	0	6½
Do. quirk OG bead flat .....	0	5	0	6½
Do. bead and flush .....	0	5	0	6½
Inch and half square framed do .....	0	5	0	6½
Do. ovolo and flat .....	0	6	0	7½
Do. and raised pannels .....	0	7	0	8½
Do. molded .....	0	6	0	7½
Do. raised on moldings .....	0	6½	0	8
If splayed, add per foot .....			0	0¾
<i>If circular flat sweep once and half, the strait</i> .....	-	-	-	-
<i>Do. if quarter inch to foot double the strait</i> .....	-	-	-	-
<i>Do. if half inch to foot, twice and half the strait</i> .....	-	-	-	-
<i>Circular soffet on plan one edge, twice do.</i> .....	-	-	-	-
<i>Do. if two edges, twice and a half</i> .....	-	-	-	-
<i>Semi-circular molded soffet in two pannel, six times the strait</i> .....	-	-	-	-
<i>Do. and splayed eight times, strait.</i> .....	-	-	-	-
<i>Elbow cappings, each</i> .....	-	-	0	4

## BOXINGS TO WINDOWS

## PER FOOT RUN.

Inch and one inch and quarter splayed .....	0	1½	0	3
Do. proper boxings .....	0	2	0	2½
Do. and circular head to bow .....	0	5	0	6

	From the Bench.		Fixed.	
	S.	D.	S.	D.
Boxings for sliding shutters, including pulley pieces, linings, fillets, &c.	-	-	0	6 $\frac{1}{2}$
Circular on plan, glued on thicknesses, or semi- circular heads, twice and a half the strait.	-	-	-	-

### OUTSIDE SHUTTERS,

PER FOOT SUPERFICIAL.

Inch and quarter and inch and half morticed clamp'd	0	3 $\frac{1}{2}$	0	5	
Do. two pannel square	-	0	3 $\frac{1}{2}$	0	5
Do. bead butt and square	-	0	4 $\frac{1}{2}$	0	6
Do. bead flush and square	-	0	5	0	6 $\frac{1}{2}$
Do. bead flush and bead butt	-	0	6	0	7 $\frac{1}{2}$
Do. circular on plan	-	0	9	0	10 $\frac{1}{2}$
If three reeds add	-	0	0 $\frac{1}{2}$	-	-
For every extra pannel add	-	0	0 $\frac{1}{2}$	-	-
Cemi-circular head measured nett twice and half.	-	-	-	-	-
<i>Hanging stiles and heads to be measured in and includ- ed in the aforesaid prices.</i>					

### INSIDE SHUTTERS OF DEAL.

PER FOOT SUPERFICIAL.

Three quarter inch to one inch and quarter clamp'd flaps, one height	-	0	3 $\frac{1}{2}$	0	5
Do. morticed clamp'd	-	0	4	0	5 $\frac{1}{2}$
Inch and one inch and quarter, two pannel square framed one height	-	0	4	0	5 $\frac{1}{2}$
Do. bead butt and square	-	0	5	0	6 $\frac{1}{2}$
Do. bead flush and square	-	0	6	0	7 $\frac{1}{2}$
Do. bead flush and bead butt	-	0	7	0	8 $\frac{1}{2}$
One and quarter and one and half inch quirk ogee bead front and square back	-	0	6 $\frac{1}{2}$	0	8
Do. do. and bead butt back	-	0	7 $\frac{1}{2}$	0	9
Do. do. raised moldings	-	0	8	0	9 $\frac{1}{2}$
If circular on plan, once and half the strait	-	-	-	-	-
For every extra pannel add	-	0	1	0	1
For every extra height, bead included	-	0	0 $\frac{1}{2}$	0	1 $\frac{1}{2}$

### SHUTTERS TO SHOP FRONTS.

PER FOOT SUPERFICIAL.

Inch and quarter or inch and half two pannel, bead butt and square	-	0	5	0	6
Do. bead flush and square	-	0	5 $\frac{1}{2}$	0	6 $\frac{1}{2}$
Do. do. and bead butt	-	0	6 $\frac{1}{2}$	0	7 $\frac{1}{2}$
If three reeds add	-	0	0 $\frac{1}{4}$	-	-
For every extra pannel add	-	0	0 $\frac{1}{2}$	-	-
Circular on plan flat sweep once and half	-	-	-	-	-
Do. on plan quick sweep twice	-	-	-	-	-
Do. the head measured nett twice and half	-	-	-	-	-
Scheem heads measures double	-	-	-	-	-
Cemi-circular do. three times	-	-	-	-	-

## SHUTTERS HUNG WITH LINES AND WEIGHTS,

PER FOOT SUPERFICIAL.

	From the Bench		Fitted in and hung.	
	S.	D.	S.	D.
Inch and $\frac{1}{2}$ inch two pannel square .....	0	4	0	5
Do. bead butt and square .....	0	5	0	6
Do. bead flush and square .....	0	5 $\frac{1}{2}$	0	6 $\frac{1}{2}$
Do. moulded and square .....	0	5	0	6 $\frac{1}{2}$
Do. do. and bead butt back .....	0	6 $\frac{1}{2}$	0	7 $\frac{1}{2}$
For every extra pannel add .....	0	0 $\frac{1}{2}$	-	-
If three reeds add .....	0	0 $\frac{3}{4}$	-	-

## FRAMED GROUNDS,

PER FOOT SUPERFICIAL.

Inch and $1\frac{1}{4}$ inch deal .....	0	3	0	4
Do. and mitred .....	0	3 $\frac{1}{2}$	0	4 $\frac{1}{2}$
Do. do. head only circular on plan three times				
Cemi-circular head twice and a half				
Skeleton ground for pilasters .....	0	2 $\frac{1}{2}$	0	3 $\frac{1}{2}$
Do. back rebated net less than nine inches .....	0	3	0	4

## DOOR LININGS,

PER FOOT SUPERFICIAL.

Inch and $1\frac{1}{4}$ inch single rebated .....	0	3	0	4
Do. do. and beaded .....	0	3 $\frac{1}{2}$	0	4 $\frac{1}{4}$
Do. do. double rebated .....	0	4	0	5
Do. and beaded .....	0	4 $\frac{1}{2}$	0	5 $\frac{1}{2}$
Do. circular on plan twice for the head only				
$1\frac{1}{4}$ and $1\frac{1}{2}$ inch square framed, linings and soffet in				
three pannels double rebated .....	0	6	0	7
Do. do. bead flush or moulded .....	0	7	0	8
Do. raised and moulded do. ....	0	7	0	8
Cemi-circular heads to soffets only, four times.				
The aforesaid linings to be back rebated for grounds.				
For every extra pannel add .....	0	0 $\frac{1}{2}$	-	-

## DOORS,

PER FOOT SUPERFICIAL.

Inch one pannel square .....	0	3	0	3 $\frac{3}{4}$
Do. folding .....	0	3 $\frac{1}{4}$	0	4 $\frac{3}{4}$
Inch and $1\frac{1}{4}$ two pannel square .....	0	3 $\frac{1}{2}$	0	4 $\frac{1}{4}$
Do. bead butt and square .....	0	4 $\frac{1}{2}$	0	5 $\frac{1}{4}$
Do. bead flush and square .....	0	5 $\frac{1}{2}$	0	5 $\frac{1}{4}$
Do. do. and bead butt .....	0	5 $\frac{1}{2}$	0	6 $\frac{1}{4}$
Do. moulded and square .....	0	5	0	5 $\frac{1}{4}$
Do. moulded on both sides .....	0	6	0	6 $\frac{1}{4}$
If raised, moulded, add for each side .....	0	0 $\frac{1}{4}$	-	-

	From the Bench		Fitted in and hung.	
	S.	D.	S.	D.
If small one pannel under, counter or dresser, add one fourth				
1½ and inch and half 4 pannels square	0	4	0	4½
Do. bead butt and square	0	5	0	5¼
Do. do. flush and square	0	5½	0	6¼
Do. do. and bead butt	0	6	0	6¾
Do. moulded and square	0	5½	0	6¼
Do. do. two sides	0	6½	0	7¼
If raised, moulded, add for each side	0	0½	0	1
If folding, add	0	0½	0	1
If any of the above are six pannels, add one-fifth				
Two inch four pannel and square	0	5	0	6
Do. bead butt and square	0	6	0	7
Do. bead flush and square	0	6½	0	7½
Do. do. and bead butt	0	7	0	8
Do. bead flush both sides	0	8	0	9
Do. moulded and square	0	6	0	7
Do. moulded both sides	0	7	0	8
raised, molded, add for each side	0	0¾		
If any of the above are folding, add	0	1		
<i>If framed six pannels, add one-fifth; If any of the aforesaid doors are made fancy, add as per value.</i>				
2½ inch six pannel bead butt and square	0	7	0	8½
Do. bead flush and square	0	8	0	9
Do. bead butt both sides	0	8½	0	9
Do. bead flush both sides	0	9½	0	10
Do. moulded and square	0	8	0	9
Do. moulded both sides	0	9	0	10
If raised mouldings, add for each side	0	0¾	0	0
If any of the above are hung folding add			0	1½
If made double margins add	0	1½		
If do. with three reeds add	0	1		
All raised pannels to be charged at per foot, run on the raising extra from the fixed price of the article where it arises	0	2		
Eight pannel quirk OG, bead flat and bead flush with six inch margins	0	10	0	11
Do. folding	0	11½	1	1
Eight pannel ovolo raised pannel lower, part bead flush and bead flush back 6 inches	0	11½	1	0¾
Do. folding	1	0½	1	2½
Eight pannel quirk ovolo, fillet raised pannels, lower part treble bead flush, and bead flush back	1	0	1	1¾
Inch and half 4 pannel wainscot moulded	1	3	1	4½
Do. mahogany	1	5	1	6½
Two inch 6 pannel wainscot double do.	1	7	1	8½
Do. mahogany	1	9	1	10½
Do. framed double margins wainscot	1	10	1	11½
Do. do. mahogany	2	0	2	1½
Do. do. if folding	2	2	2	4½
2½ inch solid mahogany folding or double margin doors, framed quirk OG, and bead, both sides raised pannels, with astragal or ovolo mouldings,				

	From the Bench.	Fitted in and hung.
	S. D.	S. D.
round do. the raisings cross-banded or fluted face of pannels, stiles, munnions, rails, and edges of the stiles veneered both sides alike, and good veneers .....	3 9	4 0
Do. veneered on both sides, on seasoned yellow deal	2 9	3
<i>If any of the above doors are circular, on plain flat sweep one and a half straight</i>		
<i>Do. if <math>\frac{1}{4}</math> inch to the foot, double the straight</i>		
<i>Do. if <math>\frac{1}{2}</math> inch to foot, twice and half do.</i>		
<i>Do. if circular heads, measure from springing twice and half straight.</i>		

## SASH DOORS.

## AT PER FOOT SUPERFICIAL.

Inch and half, and 2 inch ovelo, 2 pannels and square bottom .....	0	4 $\frac{1}{2}$ 0	5 $\frac{1}{2}$
Do. bead butt and square .....	0	5 0	6
Do. bead flush and square .....	0	5 $\frac{1}{2}$ 0	6 $\frac{1}{2}$
Do. moulded and square .....	0	5 $\frac{1}{2}$ 0	6 $\frac{1}{2}$
Do. do. two sides .....	0	6 $\frac{1}{2}$ 0	7 $\frac{1}{2}$
Do. and bead butt .....	0	7 0	8
Do. and bead flush .....	0	7 $\frac{1}{2}$ 0	8 $\frac{1}{2}$
If raised moulded, add each side .....	0	0 $\frac{1}{2}$	-
If diminished stiles, add .....	0	1	-
Two and a half and three inch sash doors diminished stiles, shutters framed, bead and flush, to appear as 6 pannels in the solid .....	1	4 1	5 $\frac{1}{2}$
Do. with sash rebated and fixed .....	1	5 1	6
If any of the aforesaid doors are astragal and hollow add .....	0	1	
One and a half and two inch wainscot, or mahogany, the two bottom pannels moulded, or bead flush and square .....	0	11 1	0 $\frac{1}{2}$
If moulded both sides .....	1	1 1	2 $\frac{1}{2}$
Do. if hung folded .....	1	3 1	5

## LEDGED DOORS,

## PER FOOT SUPERFICIAL.

Three quarters inch deal, rough .....	0	2 $\frac{1}{2}$ 0	2 $\frac{1}{2}$
Do. plough'd and tong'd .....	0	2 $\frac{1}{2}$ 0	3
Do. planed .....	0	3 $\frac{1}{2}$ 0	4
Do. plow'd and tong'd, and beaded .....	0	4 $\frac{1}{2}$ 0	4 $\frac{3}{4}$
Inch and 1 $\frac{1}{4}$ inch and 1 $\frac{1}{2}$ deal, rough .....	0	2 $\frac{1}{2}$ 0	3
Do. plow'd and tong'd .....	0	3 0	3 $\frac{1}{2}$
Do. planed .....	0	3 $\frac{1}{2}$ 0	4 $\frac{1}{2}$
Do. plow'd and tong'd, or rebated, or beaded .....	0	4 $\frac{1}{2}$ 0	5
Do. if hung folding .....	0	0	5 $\frac{1}{2}$
Ditto if in two heights .....	0	5 0	6

# GATES AND COACH-HOUSE DOORS,

PER FOOT SUPERFICIAL.

	From the Bench		Fitted in and hung.	
	S.	D.	S.	D.
Two inch framed and braces, filled in with inch deal plow'd and tongued, or rebated and beaded	0	6½	0	8
Do. with battens	0	7	0	8½
Two and a half do. one and a half framed rails and braces, filled in 1½ deal, rebated and beaded	0	7½	0	9
Do. with battens	0	8	0	9½
Do. grates framed flush and square, back and sixteen pannels	1	0	1	2
Do. head flush both sides	1	2	1	4
If framed with a wicket, add one sixth				
Do. palisadoe gates, lower part bead butt and square, filled in with palisadoes	0	10	0	11¼
Do. if bead flush bottom	0	10	0	11½
Do. in 12 pannels, bead flush and square	1	0	1	2
<i>All fancy gates to be paid for per value framed gates with ramped top rails, to be charged extra according to value of work.</i>				

# WAINSCOTTING,

Including Skirting and Facia,

PER FOOT SUPERFICIAL.

			fixed	
Inch and 1¼ deal square framed to cieling	0	2½	0	3
Do. moulded or bead butt	0	3	0	3¼
Do. bead flush	0	3½	0	4
Do. with three reeds	0	3½	0	4½
Inch and 1¼ inch dwarf wainscoting one pannel, high skirting included	0	2½	0	3¼
Do. moulded	0	3½	0	3¼
Do. bead butt	0	3½	0	3¼
Do. bead flush	0	3½	0	4
Do. three reeds	0	4	0	4½
If raking to stairs, add	0	0¼	0	1
If framed two pannels, add	0	0½	-	-
If raised mouldings, add	0	0¼	-	-
If circular on plan, add once and half straight	-	-	-	-
If quick sweep, add double do.	-	-	-	-
If beaded capping, per foot run	0	0½	0	0½
Circular do. do.	0	1	0	1½

# PARTITIONS,

Skirtings and Facias included both Sides,

PER FOOT SUPERFICIAL.

Inch deal and half inch board and brace	0	3	0	3½
Whole deal and ¾ do. do.	0	3	0	3½
Inch and 1¼ and 1½ inch framed and square	0	3½	0	4
Do. moulded	0	4	0	4½

	From the Bench		Fixed.
	S.	D.	D.
Do. bead flush and square .....	0	4 $\frac{1}{2}$	0 5
Do. moulded both sides .....	0	4 $\frac{1}{2}$	0 5
Do. and three reeds flush and square .....	0	5	0 5 $\frac{1}{2}$
Two inch and two and a half framed square .....	0	4 $\frac{1}{2}$	0 4 $\frac{1}{2}$
Do. moulded or bead, butt and square .....	0	4	0 5 $\frac{1}{4}$
Do. bead flush and square .....	0	5	0 5 $\frac{1}{2}$
Do. moulded both sides .....	0	5 $\frac{1}{2}$	0 5 $\frac{1}{2}$
Do. and bead butt and square .....	0	4	0 5 $\frac{1}{4}$
Do. bead flush and square .....	0	5	0 5 $\frac{1}{2}$
Do. bead flush and moulded .....	0	5 $\frac{1}{2}$	0 6 $\frac{1}{4}$
If 3 reeds flush and square .....	0	5 $\frac{1}{2}$	0 6 $\frac{1}{4}$
Do. on both sides .....	0	7	0 7 $\frac{1}{4}$
If raised moulded, add per foot on each side .....	0	0 $\frac{1}{2}$	-
If circular on plan, one and a half straight .....			-
If quick sweep, double the straight .....			

## DADO,

## PER FOOT SUPERFICIAL.

Inch and 1 $\frac{1}{4}$ inch dove-tailed keyed .....	0	3	0 4
Do. plowed and tong'd .....	0	3 $\frac{1}{2}$	0 4 $\frac{1}{2}$
Do. feather tongued .....	0	4	0 5
If raking to stairs .....	0	4 $\frac{1}{2}$	0 5 $\frac{1}{2}$
Do. level, circular on plan, flat sweep .....	0	7	0 8
Do. quick sweep .....	0	9 $\frac{1}{2}$	0 11
Do. circular to stairs .....	0	11	1 1
Do. wreathed to do. ....	1	3	1 5
Narrow grooved, dado grounds .....	0	0	0 1 $\frac{1}{2}$
Do. circular flat sweep .....	0	2	0 2
Do. quick do. ....	0	1 $\frac{1}{4}$	0 2 $\frac{1}{2}$
All cylinders to be charged extra.			

## STAIR CASES.

## PER FOOT SUPERFICIAL.

Inch and 1 $\frac{1}{2}$ deal step risers and carriage .....	0	5 $\frac{1}{2}$	
Add on the winders, per foot super .....	0	1	
Do. molded and glued .....	0	6 $\frac{1}{2}$	
Do. winders .....	0	7 $\frac{1}{2}$	
Do. dove-tailed for ballusters .....	0	8 $\frac{1}{2}$	
Do. geometrical .....	0	9 $\frac{1}{2}$	
Do. winders with one circular end including furrings to soffets .....	1	0	
Do. to circular bridge board .....	1	2	
If tongued top and bottom edge, add per foot .....	0	1	
Step risers and carriages, mitred to string board, and return nosings, dove-tailed for ballusters .....	0	9	
Quarter curtail steps, glued upright .....	1	9	
Do. block and veneer .....	4	0	
Proper curtail step and riser .....	10	6	
Returned moulded nosings, each .....	0	6	
Do. do. and tongued .....	0	7	

# JOURNEYMEN'S TASK-WORK PRICES.

117

	From the Bench.	Fixed.
S. D.	S. D.	
N. B If stairs are done with framed carriages, add 4d. per foot on the stairs		
All joints of steps feather tongued, add per foot sup. ....	0	1
Winder circular one end moulded, nosings, glued riser included .....	0	11
Do. tong'd top and bottom edge.....	1	0
Do. circular both ends.....	1	3
Do. tong'd top and bottom edge.....	1	5
All joints of steps to be plowed and feather tong'd		
Inch and 1½ plain string board, rebated and beaded ..	0	5
Do. sunk face and moulded.....	0	6
Do. do. mitred to risers .....	0	8
Level circular on plan, glued upright.....	1	6
Do. sunk face .....	2	0
Wreathed and glued upright .....	3	6
Do. sunk face .....	4	6
Do. plain face in 4 thicknesses .....	4	0
Do. do. sunk face.....	5	0
Do. do. moulding bent in .....	5	4
For every inch under 12 inches opening, add per foot run .....	0	1½

## HAND RAIL BALLUSTERS, &c.

### PER FOOT RUN.

Deal molded hand rail.....	0	6
Do. sunk for ballusters .....	0	7
Level circular or ramped.....	1	9
Do. quick curve, or swan's neck.....	2	0
Do. Solid wreathed .....	5	6
N.B. There is more trouble in proportion to circular and wreathed rails in deal than in mahogany.		
Mahogany strait molded hand rail.....	1	2
Do. level circular on ramped .....	3	6
Do. quick curve, or swan's neck.....	4	0
Do. solid wreathed .....	8	0
Do. under 12 inches.....	9	0
Twist to curtail or scroll, measured to strait part only .....	9	0
Do. wreathed in thicknesses .....	12	0
Do. under twelve inch openings.....	14	0
All cylinders to be charged extra.		
Mitred cap.....	1	6
Joint screw each .....	1	0
Cap, worked by hand .....	2	0
Deal, or wainscot, or mahogany square bar ballusters, each .....	0	3
Do. dove-tailed do. ....	0	4
Planceer, both edges, rounded .....	0	1½
Do. both edges moulded .....	0	2
Square framed newell .....	0	5
Fixing iron column to curtail, each .....	1	6

	From the Bench S. D.	Fixed.	
		S.	D.
Fixing iron ballusters, each.....		1	0
Molded nosings returned to ends of steps.....		0	6
Cut brackets to do, each.....		0	8
Circular do. moulded nosing.....		1	0
Dousings to steps and risers.....		0	7
Ho. to winders.....		0	10
Do. circular.....		1	3
Extra sinking to hand-rail, for iron rail, per foot run.....		0	2
Do. circular ramped, or wreathed.....		0	6
<i>All cylinders to be charged extra.</i>			

## CRADLING,

## PER FOOT SUPERFICIAL.

Strait to entablature.....	0	4
Circular flat sweep.....	0	5
Do. quick do.....	0	7
Do. ends only.....	0	10
If ploughed for tongued blocking, add.....	0	1

## CIRCULAR WORK,

## PER FOOT SUPERFICIAL.

Rough $\frac{3}{4}$ and inch deal cover and bearers.....	0	3
Edge cut circular.....	0	1 $\frac{1}{4}$
Circular soffets backed on cylinder, grooves filled in with stuff, the same way as the grain, and backed with canvas.....	1	3

## COLUMNS AND PILASTERS,

## PER FOOT SUPERFICIAL.

Whole deal plain diminished columns, glued and blocked, not exceeding 14 inches diameter.....	1	0	1	1
Do. under 14 inches to 10 inches.....	1	2	1	3
Do. under 10 inches.....	1	4	1	5
Plain pilasters, glued and backed.....	0	4	0	5
Do. diminished.....	0	5 $\frac{1}{2}$	0	6 $\frac{1}{2}$
Flutings to do. columns, per foot run.....	0	2	-	-
Do. to pilasters.....	0	1	-	-
Heading to fluting.....	0	3	-	-
Caps and bases glued as columns.....	1	8	1	9
Do. in thicknesses.....	1	4	1	5
Neckings, moulded to columns, each under 10 inches diameter.....	2	6	2	9
Do. from 10 inches to 14 inches diameter.....	3	6	4	0
Headings to flutes.....	0	6	-	-

## MOULDINGS,

## PER FOOT SUPERFICIAL.

Base, surbase, double architrave, and all similar mouldings.....	0	6	0	7
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	From the Bench.		Fixed.	
	S.	D.	S.	D.
Quirked do. ....	0	7	0	8
Circular head to cemi, not less than 4 feet openings	1	6	1	9
Do. on plan flat sweep.....	1	0	1	2
Do. and half inch to a foot.....	1	9	1	11
Do. quick sweep .....	2	0	2	2
Strait mouldings struck by hand.....	0	7	0	8
Do. circular on head, or plan .....	1	8	1	10
Housings to mouldings, each.....			0	3
<i>Wainscot or mahogany mouldings, add as per value of work done.</i>				

## RUNNING ARTICLES,

## PER FOOT RUN.

Fillets.....	0	0 $\frac{1}{2}$	0	0 $\frac{3}{4}$
Beads.....	0	0 $\frac{1}{2}$	0	0 $\frac{3}{4}$
Capping.....	0	0 $\frac{3}{4}$	0	1
OG do. ....	0	1	0	1 $\frac{1}{2}$
Square angle staff .....	-		0	2
Rebated.....	0	2	0	2 $\frac{1}{2}$
Do. beaded .....	0	2 $\frac{1}{2}$	0	3
Do. returned.....	0	3	0	4
Half inch, and three quarter inch quirk OG, ovolo..	0	1	0	1 $\frac{1}{2}$
Single cornice, or architrave, not above 4 inch girt..	0	2 $\frac{1}{2}$	0	3
Astragal, or reeds on doors or shutters .....	0	1	0	1 $\frac{1}{2}$
Small reeds, each per foot in reeded mouldings, stuck single up to half an inch.....	0	0 $\frac{1}{4}$	-	
Do. above half an inch, and grooved space.....	0	0 $\frac{1}{2}$	-	
Grooves.....	0	0 $\frac{1}{4}$	-	
Narrow grounds to skirtings .....	0	0 $\frac{3}{4}$	0	1 $\frac{1}{4}$
Do. grooved, or rebated .....	0	1	0	1 $\frac{1}{2}$
Inch do. framed to chimneys .....	0	1 $\frac{1}{2}$	0	2
Whole deal do.....	0	1 $\frac{1}{2}$	0	2
Rounded, molded, or mitred stops.....	0	1	0	1 $\frac{1}{2}$
Double beaded chair-rail.....	0	1	0	2
<i>If circular, double the above prices, all plugging to walls included.</i>				
Small framed legs, rails, and runners .....	0	2 $\frac{1}{2}$	0	3
Rule joint .....			0	3
Housings to mouldings, each under 4 inches .....			0	2

## DEAL DRAWERS DOVE TAILED.

## PER FOOT SUPER.

Slit deal, do. ....	0	4 $\frac{1}{2}$
Three quarter inch do. do. ....	0	4 $\frac{1}{2}$
Inch do. and one a quarter do. ....	0	5 $\frac{1}{2}$
Inch and a half do. ....	0	6
Slit three quarter bottoms, planed 2 sides.....	0	2 $\frac{1}{2}$

## RUNNERS AND SLIDERS TO DRAWERS.

Two and a half framed and beaded legs, per foot run.....	0	2 $\frac{1}{2}$
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	From the Bench.		Fixed.	
	S.	D.	S.	D.
Rebated runners do.....	0	11	1	2
Inch and half wainscot do. ....	0	2		
Do. or deal glued sliders to do, .....	0	1		

## COUNTERS AND COUNTER FRONTS.

## PER FOOT SUPERFICIAL.

Inch deal square front .....	0	4		
Whole deal do. ....	0	4		
Do. with ovolo, or OG, square back .....	0	4	1	2
Do. with quirk do. and do. ....	0	5		
Inch and half do. do. ....	0	5	1	2
Inch wainscot counter-top .....	0	5		
Do. mahogany .....	0	6		
Clamps each .....	0	8		
Morticed do. ....	1	6		
Do. and mitred .....	2	3		
Extra for flap .....	1	0		
Do. grooved and tongued heading joints .....	1	0		
Edge cut circular, per foot run .....	0	3		
Wainscot molded framed fronts ..	0	8		
Mahogany do. ....	0	9		
Circular flat sweep half the strait .....	-	-		
$\frac{1}{2}$ inch to the foot double .....	-	-		
$\frac{1}{2}$ inch do. twice and half .....	-	-		

## WATER CLOSETS.

## PER FOOT SUPERFICIAL.

Whole deal seat riser and bearer .....	0	4		
Mahogany do. ....	0	9		
Framed top, and clamp flap .....	1	2		
$\frac{3}{4}$ inch mahogany skirting .....	0	9		
Framed bearers, per foot run .....	0	2		
Holes cutting, each .....	1	4		
Do. for pull bead included .....	1	0		

## TABLING.

Oak top rounded 3 by $2\frac{1}{2}$ or 3 to tops o. mangers .....	0	3	1	2
Circular rim of racks, two thicknesses of whole deal per foot run .....	0	4		
Aris seed rack .....	0	1	1	2
$1\frac{1}{2}$ inch rough oak litter board, edge rounded .....	0	2		
Deal $2\frac{1}{2}$ rack stoves .....	0	2		
Harness pins and rail framed .....	0	5		
Harness pins 9 to 12 inches long .....	0	6		
Holes to end of rack stoves .....	0	1		

## THREE QUARTER LININGS.

## Grooved, tongued, and beaded.

Ten feet .....	0	4		
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	From the Bench.	
	S.	D.
Twelve feet .....	0	5
Fourteen feet .....	0	6

### PREPARED FLOOR BOARDS.

To be listed, gauaged, and re-bated, to a thickness.

Ten feet inch .....	0	3
Twelve feet do. ....	0	4
Fourteen feet do. ....	0	5
Ten feet inch and quarter .....	0	3½
Twelve feet do. ....	0	4½
Fourteen feet do. ....	0	5½

### BATTENS.

Ten feet inch .....	0	2½
Twelve feet do. ....	0	3
Fourteen feet do. ....	0	4
Ten feet do. inch and quarter .....	0	3
Twelve feet do. ....	0	3½
Fourteen feet do. ....	0	4½

## MASON'S WORK AND PRICES.

### ALL MATERIALS.

	L.	S.	D.
Portland stone measured nett, per foot cube .....	0	5	4
Do. sawed scantling size .....	0	5	10
Plain work to do. per foot superficial .....	0	1	2
Tooled do. extra .....	0	0	6
Circular plain work do. ....	0	1	8
Moulded work do. ....	0	1	9
Circular moulded work do. ....	0	2	5
Sunk work do. ....	0	1	11
Plain sunk work ..	0	1	6
Sunk joggling to do. per foot run .....	0	2	0
Grooving to do. ....	0	0	4
Throating to do. ....	0	0	2
Portland stone coping, 13 inches wide, and 2 inches thick, per foot run .....	0	3	0
Portland stone coping, per foot running measure 13 inches wide, 3 inches and a half in front, 2 inches thick back edge, cramped, throated, and run with lead, do. ....	0	4	3
Do. twelve inches wide, and three inches in front, and one inch and a half back, do. ....	0	3	6
Extra for labour to quoin stone, each .....	0	1	6
Sawing or half plain work per foot superficial - - -	0	0	7½

## PORTLAND STONE SINKS.

	L.	S.	D.
Seven inches thick, per foot superficial.....	0	6	6
Eight inches thick, per foot superficial.....	0	7	6
Five hole sink stones worked, each or a piece.....	0	3	6
Portland stone balusters, 19 inches long, five inches diameter, joggled in full half inch at each end, each....	0	14	0
Do. half balusters, do.....	0	9	0
Portland step, and set, per foot cube .....	0	7	0
Do. paving in strait course, one inch and half thick, at per foot superficial.....	0	2	4
Do. and two inches thick, do.....	0	2	7
Do. two and a half do.....	0	2	9
Do. three inch do.....	0	3	2
Do. octagan paving, with black marble dots, do.....	0	5	0
Do. paving laid diagonally in squares, do.....	0	3	6
Do. new channel stone, seven inches wide, per foot run..	0	2	3
Old Portland paving, with black dots, rubbed, squared, and re-laid, per foot superficial.....	0	1	9
Portland taken up, squared and re-laid.....	0	0	5
Do. rubbed square and re-laid.....	0	0	9
Old do. astragal steps, taken up, jointed, rubbed, and set per foot, run.....	0	0	9
Old do. and Purbeck steps taken up and re-set at do.....	0	0	6

## GRANITE.

Aberdeen and Cornish Granite per foot cube, measured nett .....	0	5	6
Plain work to do. superficial .....	0	3	0
Arch do. ....	0	3	6
Quoins do. ....	0	3	7
Setting do.....	0	0	4

## YORKSHIRE STONE.

Paving in random courses, per foot superficial.....	0	1	1
Do. in straight courses, do.....	0	1	2
Do. 70 feet super to a ton Yorkshire 3 inches thick.....	0	1	7
Do. squared and re-laid.....	0	0	3½
Do. with circular arched joints.....	0	2	0
Yorkshire ealing edge, paving to foorpaths, areas, vaults, &c. 2 inches and a half thick, at the wharf, per 100 feet superficial.....	3	10	0
Do. coping, 13 inches wide, 3 inches front, two inches back, cramped, throated, and joints, run with lead, per foot run.....	0	2	6
Do. 12 inches wide, 3 inches in front and 2 on the back, edge and do.....	0	2	6
Do. do. and 16 inches wide.....	0	3	6
Do. do. and 18 inches do.....	0	4	0
Old do. jointed and re-set do.....	0	0	6
Yorkshire step, per foot run.....	0	3	6
Do. window cills, per foot run.....	0	1	9
Moore stone kirb, 12 inches wide, and 7 inches thick, per foot running.....	0	3	0

	L.	S.	D.
Do. circular or elliptical do.....	0	4	0
Labour to kirb stone, and mortar, per foot running measure .....	0	0	6
Coal plates let into stone paving each.....	0	2	6
Extra to paving on dry drains add .....	0	0	3

### PURBECK STONE PAVING &c

#### PER FOOT SUPERFICIAL.

Fifty five feet superficial a ton.			
Purbeck paving in random courses.....	0	1	4
Do. straight do.....	0	1	6
Do. and rubbed.....	0	2	0
Do. squaring and re-laying.....	0	0	4
Do. and bedded in terras, add.....	0	0	6
Chancelstone, per foot run .....	0	2	0
Do. steps, do.....	0	3	9
Do. squared and re-set.....	0	0	8
Do. sinks 7 inches thick, per foot superficial.....	0	7	0
Do. 8 inches, do. do.....	0	8	0

### CRAGLEITH STONE.

Cragleith stone, per foot cube .....	0	6	6
Plain work, per foot superficial .....	0	2	6
Sunk work .....	0	3	3
Circular sunk .....	0	5	0
Circular circular sunk .....	0	7	6
Molded work .....	0	5	6
Circular ditto .....	0	7	0

### PORTLAND STONE.

In chimney pieces and slabs 1 inch thick .....	0	2	2
Do. and the slab inch and half thick, do .....	0	2	5
Do. two inches thick, do.....	0	2	8
Do. two inches and a half thick do.....	0	2	10
Arch cut mantle.....	4s.	0	6
Do. in window cills, 8 inches wide, and 5 inches thick, wrought, throated, weathered, and fixed in, of one piece, at per foot running.....	0	3	2
Do. and six inches wide, do.....	0	2	10
Do. in do. 6 inches wide, 2½ thick, wrought, weathered, and throated, and fixed in, of one piece, at per foot run .....	0	1	9
Do. and 3 inches thick, do. ....	0	2	0
Old do. cleaned, sanded, scoured, and set.....	0	0	7
Cramps and letting in, each to Portland.....	0	0	10
Do. and run with lead.....	0	1	6
Small cramps to chimney pieces.....	0	0	4
Holdfasts do. ....	0	0	3
Inch holes cut for iron work, each .....	0	0	2½
2 inch mortice holes, do.....	0	0	6
Large do.....	0	0	10

## PAINSWICK STONE.

	£	s	d.
Painswick, per foot cube .....	0	5	0
Plain work per foot superficial.....	0	0	9½
Sunk work .....	0	1	0
Molded ditto .....	0	1	2½
1 inch chimney pieces.....	0	2	0

## RYEGATE.

1 inch fire stone, hearth, and covings, at per foot superficial	0	1	3
1½ do. ....	0	1	5
2 inch do. ....	0	1	8
4 inch do. bottoms to ovens, per foot superficial.....	0	2	8
Do. search to do. per foot run.....	0	2	9

## BATH STONE.

Bath Stone, per foot cube.....	0	4	0
Ditto scantling .....	0	4	6
Plain work per foot superficial.....	0	0	8
Sunk work .....	0	0	10
Circular circular sunk .....	0	2	6
Molded work - - - - -	0	1	2
1 inch chimney pieces - - - - -	0	1	3

## MARBLE CHIMNEY PIECES.

Veined marble, per foot cube, with new duty included..	2	0	0
Plain work to do. per foot superficial .....	0	4	6
Molded to do. ....	0	15	0
Sunk work to do.....	0	10	0
Circular plain.....	0	10	0
Sunk do. ....	0	14	0
Molded do. . ....	1	0	0
1 inch mantle jaumb, and slab, per foot super .....	0	10	0
New dove, do. in do.....	0	12	0
Purple mantle jaumbs and slab, new do.....	0	13	0
Purple covings, two inches thick, do.....	0	10	0
Black ditto .....	0	12	0
Wyatt's slate covings, ½ inch thick, do.....	0	3	6
Old marble chimney pieces and slabs, cleaned and re-set per foot superficial.....	0	1	6

## STATUARY.

Statuary, new, 1 inch slab, jaumbs, and mantle, super.	1	6	0
Bastard statuary, in do.....	0	14	6
Egyptian marbles .....	0	18	6
Treble reeded edge to do. per foot running do. ....	0	3	6
Quirk OG, and fillet or reed moulded do.....	0	3	6
Astragal with reeds, neckings, run.....	0	4	6
Veneering in Jasper marble .....	2	0	0
Do. in Sienna, or Brocatella marbles.....	1	5	0
N. B. The prices of ornaments, as also marbles, vary and differ in prices in wood, stone, marble, and stucco according to the richness, and goodness of the materials and workmanship, which must be inspected before a proper value can be fixed, and calculations made on the prime cost.			

# MASON'S WORK AND PRICES.

125

## MASON'S DAY-WORK PRICES.

L S D.

Mason, per day .....	0	6	0
Polisher, do. ....	0	4	6
Labourer, do. ....	0	3	9
Mortar, per hod .....	0	0	7
Chimney cramps, each of iron .....	0	0	4
Holdfasts, do. ....	0	0	3
Bag of plaster, do. ....	0	1	6

## PLASTERER'S WORK AND PRICES.

ALL MATERIALS, PER YARD.

Lime whiting once over, per yard .....	0	0	1 $\frac{1}{2}$
Do. twice over, do. ....	0	0	2 $\frac{1}{2}$
Lime whiting, with the Vauxhall stone burnt lime per yard twice .....	0	0	3 $\frac{1}{2}$
Scraping stopping, washing and whiting, to old work, do. ....	0	0	3 $\frac{1}{2}$
New work, white only .....	0	0	2
Do. to new plain cornices, per foot run .....	0	0	1
Wash, and stop, and white, to old ciplings slightly ornamented, per yard .....	0	0	6
Do. with frames and compartments .....	0	1	0
Do. with rich do. ....	0	1	6
Do. plain moulding, cornices, stopped, and whited, per foot run .....	0	0	1
Colouring, plain and common, per yard .....	0	0	5
French grey, orange, or straw colour, per do. ....	0	0	6
Do. blue do. ....	0	0	7
Do. pea green, with verditor, do. ....	0	1	0
Wash stop and white facia, and moulded do. ....	0	0	4
Do. and colour on rough cast do. ....	0	0	6
Do. plain cornices, per foot run .....	0	0	1
Do. enriched do. do. ....	0	0	3
Walls sized for paper do. ....	0	0	1 $\frac{1}{2}$

## RENDERING ON BRICK WORK.

PER YARD.

	L.	S.	D.
Rendering chimnies, set and blacked each .....	0	1	6
Do. walls one coat rough, per yard .....	0	0	6
Do. trowelled for paper, do. ....	0	0	8
Do. and set with fine stuff, do. ....	0	0	10
Do. to groins, do. ....	0	1	6
Do. in circular work, do. ....	0	1	1
Do. and floated do. set .....	0	1	1
Do. and trowelled for paper, do. ....	0	0	11
Do. and set with fine stuff, do. ....	0	1	1
Floated, bastard finishing on brick, do. ....	0	1	9

	L.	S.	D.
Do. circular do. in niches, do. or groins.....	0	2	2
Do. trowelled, do. ....	0	2	5

## LATHING AND PLASTERING.

## PER YARD.

Lathing and nails, per yard.....	0	1	0
Do. walls one coat rough, per yard.....	0	1	7
Do. and trowelled for paper, do.....	0	1	8
Do. and set with fine stuff, do.....	0	1	10
Do. and circular, do.....	0	2	4
Do. with two coats lime and hair, do. ....	0	1	10
Do. and set over with fine stuff, do.....	0	2	1
Floated do. and set and white, do.....	0	2	3
Do. to ceilings only, do.....	0	2	4
Do. to groins, do. and circular, per foot.....	0	0	6
Do. bastard finishing on lath and trowelled, do.....	0	2	9
Do plain frieze and set, per foot superficial.....	0	0	4
Do. and soffets, do.....	0	0	5
Do. to backs of niches.....	0	0	7
Do. to heads of niches, do.....	0	0	10
Rough casting on single fir laths, at per yard superficial	0	3	0
Circular do. no scaffold.....	0	3	10
Do on brick fronts, or other brick work, and no scaffold- ing .....	0	2	0
Circular do. do.....	0	2	6
N. B. A bundle of laths is sufficient for 4 yards of Plastering. Scaffolding charge extra.			

## STUCCO.

## PER YARD.

On brick rough do.....	0	1	7
Do. floated and trowelled, do.....	0	2	1
Do. on laths, rough, do.....	0	2	7
If trowelled, per yard add .....	0	0	6
Do. circular, do. ....	0	4	0
Do. do. in back of niches, per foot super.....	0	0	9
Do. to heads.....	0	1	0
Do. groins on brick-work, per foot superficial.....	0	0	6
Do. do. on single laths, do.....	0	0	8
Do. do. to resemble stone, do. add .....	0	1	0
Do. add extra for dados, do.....	0	0	2
Do. do. circular do. do. ....	0	0	6
Arises to groins, floated and set, per foot run.....	0	0	2
Rustics, raised and chamferred, do. ....	0	0	9
Raised fascia plain, do.....	0	0	6
Do. key stone, do.....	0	1	3
Do. four inch reveals to windows, do. run .....	0	0	5
Do. circular, do. ....	0	0	6
Do. strait 9 inch do. ....	0	0	9
Do. circular, do.....	0	0	11
Bayley's composition stucco per yard superficial.....	0	3	9
Plain face of brick fronts, do. ....	0	3	9
Plain mouldings, do. per foot do. ....	0	2	4
Run of aris, do. do.....	0	0	3
Do. of 4-inch reveals. ....	0	0	6

## ROUGH CASTING,

PER YARD.

	L.	S.	D.
One coat lime and hair on brick .....	0	1	7
Do. two coats .....	0	2	0
Do. lath and plaster one coat .....	0	2	7
Do. two coats .....	0	3	0
Do. if on double fir lath, as it ought to be done, and wrought 4d. nails, add 1s. per yard on the lath work			

## PARKER'S CEMENT.

PER YARD.

Render to Tanks, &c. ....	0	2	0
Do. in stucco with trowel only .....	0	2	9
Do. do. and float to fronts, &c. ....	0	3	9
Jointed and plain coloured add. ....	0	1	0
Do. and coloured in shades to imitate stone .....	0	1	9
Add extra if on single laths .....	0	1	0
Do. do. if on double laths .....	0	2	0
Arises, per foot run .....	0	0	2½
Reveals, do. including arises up to 5 inches wide .....	0	0	7
Do. do. up to 9 inches .....	0	0	9
Mouldings 4 inches girt and under .....	0	0	10
Do. above do. per foot superficial .....	0	2	6
Add for circular work one third the above prices.			

## PLASTER FLOORS.

Grey two inches and a half thick, on reed or lath, per square .....	3	15	0
Do. one inch thick, do. do. ....	2	0	0
Do. red plaster floor, on reed or double lath do. ....	4	10	0
Pugging on single fir laths 1½ inch thick, with lime, hair, and sand, per yard, the joice included .....	0	1	0
Do. with Lord Mahon's plaster do. and do. measured in do. ....	0	1	9
Do. to staircases, do. ....	0	2	6

## SMALL MOULDINGS.

PER FOOT RUN.

All under six inches girt, per foot run. ....	0	0	7
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## PLASTER CORNICES

Do. six inches girt, per foot run .....	0	0	9
Do. seven inches do. ....	0	0	10½
Do. eight inches do. ....	0	0	11
Do. nine inches do. and all above nine inches to measure, per foot superficial, ....	0	1	4
All angles to cornices, above four in a room, up to six each .....	0	1	0
Do. above six .....	0	1	2
Do. circular do. ....	0	0	5
Do. of reed, or compound mouldings, do. super .....	0	1	6

	L.	S.	D.
Do. if circular, do. ....	0	2	0
All cast ornaments per inch.....	0	0	3 $\frac{1}{2}$
Raffled or open leaves, per inch .....	0	0	4
Do. circular to do. ....	0	0	5
Do. if elliptical, to do. ....	0	0	6
Gothic mouldings, in short lengths, do.....	0	0	5
Circular do. with small crotchets, do.....	0	0	7

## FRIEZES AND SOFFEETS.

## PER FOOT SUPERFICIAL

Floated frieze on laths, at per foot superficial.....	0	0	4
Do. and set, do. ....	0	0	5
Soffeet on lath floated and set .....	0	0	6
Do. circular, do.....	0	0	8
Do. elliptical, do.....	0	0	10
Do. sunk spandrel pannels, do.....	0	1	0
Plain circular, do. in two or three pannels, do.....	0	1	4
Do. OG and flat pannels, raised margins, the pannels circular, do. ....	0	2	0

## HAMELIN'S MASTIC CEMENT.

## PER FOOT SUPERFICIAL.

On brick or stone work .....	0	0	7
Moldings .....	0	2	9
Reveals and narrow margins under 12 inches wide, per inch wide and foot long .....	0	0	1
All arrises, except those to moldings, per foot, run ....	0	0	3
Thickness more than $\frac{3}{8}$ th is extra to the above			

## CHAMBERS'S BRITISH POZZOLANO,

## PER FOOT SUPERFICIAL.

On brick or stone work, to imitate the several kinds of building stone in use.....	0	0	6
Do. and jointed with fine white do. ....	0	0	7
Do. with facing of fine white Pozzolano and jointed ..	0	0	8
Rough grained Pozzolano for cottages or basements ..	0	0	6
Moldings .....	0	2	6
Grey Pozzolano floors per square .....	2	18	0
Colored do. or tessalated, as per value. Arreses, per foot run	0	0	2 $\frac{1}{2}$

All thicknesses more than  $\frac{3}{8}$  in. extra to above.

The varieties in tint and fineness of the internal stuccoes are too numerous for an insertion of the prices—

It may be scoured, is incapable of injury by ordinary violence, and forms a fresco equally durable, and with colours as beautiful and indelible, as those in the remaining specimens of the antient Greeks and Romans. Executed by Jearrad and Skirrow, 27, Adams' Street East, Manchester Square.

## PLASTERER'S DAY WORK PRICES.

Plasterer per day .....	0	6	0
Labourer .....	0	3	9

# PLASTERER'S WORK AND PRICES

129

	L.	s.	D.
Hawk boy.....	0	2	0
Lime and hair, per hod.....	0	0	10
Fine stuff, do.....	0	1	4
Stucco, do.....	0	2	6
Putty, do.....	0	2	0
Cement per bushel.....	0	4	6
Sand, per bushel.....	0	1	0
Plaster, a single bag.....	0	1	6
Fir laths and nails, per bundle.....	0	3	6
Two-penny nails, per thousand, rose.....	0	1	9
A gallon of size.....	0	0	9
Whiting, per dozen.....	0	0	6
Pail of whiting and size.....	0	2	0
Do. of lime white and size.....	0	1	6

## PLASTERERS WORK AND PRICES.

### LABOUR ONLY.

	Per Yard superficial.
Lime whitening once.....	0 0 0 $\frac{1}{2}$
Do. twice do.....	0 0 1
Whitening to new work, do.....	0 0 1
Do. to new plain cornice, per foot.....	0 0 0 $\frac{1}{2}$
Do. to enriched, do.....	0 0 0 $\frac{3}{4}$
Washing, stop, scrape and white to old work, per yard.....	0 0 1 $\frac{1}{2}$
Do. to old plain cornice, per foot.....	0 0 0 $\frac{1}{2}$
Do. to enrich, do.....	0 0 0 $\frac{3}{4}$
Wash, stop, and common colour, per yard.....	0 0 2
French grey, orange, or lemon.....	0 0 3

### RENDERING ON WALLS.

	At per Yard superficial.
	L. s. D.
Rough rendering only, per yard.....	0 0 2
Rendering and set, do.....	0 0 3 $\frac{1}{2}$
Floated do.....	0 0 5
Circular, do.....	0 0 6 $\frac{1}{2}$
Do. to groins.....	0 0 11
Chimneys render and sett each.....	0 0 9

## LATHING AND PLASTERING.

### AT PER YARD SUPERFICIAL.

Lathing only.....	0	0	2
Do. one coat lime and hair, do.....	0	0	4
Do. and set with fine stuff, do.....	0	0	6
Floated and set do.....	0	0	7 $\frac{1}{2}$
Do. to ceilings.....	0	0	8
Do. circular, do.....	0	0	10

## STUCCO,

### PER YARD SUPERFICIAL.

Stucco trowelled on brick walls, &c.....	0	0	10
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	L.	S.	D.
Do. circular, do. ....	0	1	1
Do. trowelled on lath, do. straight .....	0	1	0
Do. circular do. ....	0	1	4
Do. on brick walls, outside do. ....	0	0	10
Do. on lath, do. ....	0	1	1
Outside stucco an brick trowelled, and with dorking stone lime .....	0	1	3
Do. on laths and do. ....	0	1	5
Do. circular on brick .....	0	1	6
Do. do. on lath .....	0	1	9
Groins per foot superficial .....	0	0	2 $\frac{1}{2}$
Do. on laths .....	0	0	3 $\frac{1}{2}$
Circular back of niches lathed, &c. ....	0	0	4
Do to heads of do. ....	0	0	6
Arises per foot run .....	0	0	1 $\frac{1}{2}$
Quirk to wood beads do. ....	0	0	0 $\frac{1}{2}$
Bead and quirk do. ....	0	0	2
Do. and double quirk, do. ....	0	0	3
Reeds or other mouldings, add ....	0	0	1
Circular do. once and half straight .....			
Circular, circular, double do. ....			
Four inch reveals to windows .....	0	0	2
Circular, do. ....	0	0	2 $\frac{1}{2}$
Nine inch, do. ....	0	0	3 $\frac{1}{2}$
Circular, do. ....	0	0	4 $\frac{1}{2}$

## PAKKER'S, FRANCIS, OR GRELLIER'S CEMENT:

PER YARD.

Render and float on brick .....	0	1	5
Do. do. on lath .....	0	1	6
Jointed to imitate stone, add .....	0	0	3
Circular on brick, add .....	0	0	5
Do. on lath, add .....	0	0	6
Arises per foot run .....	0	0	1 $\frac{1}{2}$
4 inch reveals, do. ....	0	0	2
Do. circular .....	0	0	2 $\frac{1}{2}$
9 Inch, do. ....	0	0	3 $\frac{1}{2}$
Do. circular .....	0	0	4 $\frac{1}{2}$

## ROUGH CASTING,

PER YARD.

Rough casting on outside brick walls, do. ....	0	0	7
Do floated .....	0	0	9
Do. on lath, do. ....	0	0	9
Do. and floated, do. ....	0	0	11
Do. circular .....	0	1	3

## PLASTER FLOORS,

PER SQUARE.

Grey plaster floor, 2 inches thick, on reed or lath .....	1	0	0
Do. red plaster floor, on reed or double lath per square ..	0	18	0
Do. one inch only .....	0	15	0

L. S. D.

## CORNICES,

PER FOOT RUNNING.

Plain cornices less than 4 inches girt, do.....	0	0	2
Do. girt, and under 6 inches, do.....	0	0	5
Do. girt, and under 9 inches, do.....	0	0	7
Do. nine inches and upwards girted per foot superficial	0	0	9
Enriched members to cornices that are cast solid to two inch girt, per foot run.....	0	0	2 $\frac{1}{2}$
Do. circular do. ....	0	0	4
Hollow members, enriched, put up single to one inch girt	0	0	2 $\frac{1}{2}$
Do. from one to two inch, do.....	0	0	4
Do. circular.....	0	0	5 $\frac{1}{2}$
Soffeets and plancers reeded, or square sinkings to be girt with the cornice, and charged extra for each reed or sinking per foot run .....	0	0	0 $\frac{1}{2}$

## SMALL MOULDINGS,

PER FOOT RUN.

OG, or ovolo neckings, or plain astragal,.....	0	0	1 $\frac{1}{2}$
Do. circular, do.....	0	0	2
Enriched neck mouldings, do.....	0	0	4
Do. circular, do. ....	0	0	5
Reed mouldings in pannels, &c. do.....	0	0	3

## QUIRKS, BEADS, &amp;c. &amp;c.

PER FOOT RUN.

Quirk and foot beads.....	0	0	0 $\frac{1}{2}$
Beads strait do. ....	0	0	1
Do. and double quirk, do.....	0	0	3
Do. bead and double quirk circular.....	0	0	4
Do. elliptical, do.....	0	0	5
Outside stucco arises, do. ....	0	0	1 $\frac{1}{2}$

## FRIEZES AND SOFFEEETS.

PER FOOT SUPERFICIAL.

Plain Floated frieze, per foot superficial.....	0	0	2
Do. circular, do.....	0	0	3
Soffeet circular, do.....	0	0	3 $\frac{1}{2}$
Do. elliptical, do.....	0	0	4
The above are not exact fixed prices, for much depends on the workmanship, and must be inspected before properly priced.			

FRIEZES, SOFFTEES, AND STRINGS  
ENRICHED.

PER FOOT RUN.

Two inch or less, per foot run .....	0	0	4
Three, do. do.....	0	0	5

	L.	S.	D.
Four, do. do. ....	0	0	6
Five, do. do. ....	0	0	8
Six, do. do. ....	0	0	10
Seven, do. do. ....	0	1	0
Eight, do. do. ....	0	1	2½

## A TABLE.

FOR PLASTERERS, PAINTERS, PAVIORS, &amp;c.

Shewing, at one view, the number of square or superficial yards contained in any number of feet, from two yards or eighteen feet to any amount.

No. of Feet.	Sq. yards	No. of Feet.	Sq. yards	No. of Feet.	Sq. yards.	No. of feet.	Sq. yards.	No. of Feet.	Sq. yards.
18	2 243	27	468	52	693	77	909	101	
27	3 252	28	477	53	702	78	918	102	
36	4 261	29	486	54	711	79	927	103	
45	5 270	30	495	55	720	80	936	104	
54	6 279	31	504	56	729	81	945	105	
63	7 288	32	513	57	738	82	954	106	
72	8 297	33	522	58	747	83	963	107	
81	9 306	34	531	59	756	84	972	108	
90	10 315	35	540	60	765	85	981	109	
99	11 324	36	549	61	774	86	990	110	
108	12 333	37	558	62	783	87	999	111	
117	13 342	38	567	63	792	88	1008	112	
126	14 351	39	576	64	801	89	1035	115	
135	15 360	40	585	65	810	90	1080	120	
144	16 369	41	594	66	819	91	1125	125	
153	17 378	42	603	67	828	92	1170	130	
162	18 387	43	612	68	837	93	1215	135	
171	19 396	44	621	69	846	94	1260	140	
180	20 405	45	630	70	855	95	1305	145	
189	21 414	46	639	71	864	96	1350	150	
198	22 423	47	648	72	873	97	1395	155	
207	23 432	48	657	73	882	98	1440	160	
216	24 441	49	666	74	891	99	1580	170	
225	25 450	50	675	75	900	100	1620	180	

Explanation of this table, as going further with the figures, is useless.

## EXAMPLE.

Suppose the square or superficial contents of any dimensions in feet be 693, how many square yards are there in that number?

Look in the table at the top of the nearest number of feet thereto, which in this case is the exact number; and the next column of figures, under the words at top square yards, and opposite to the number of 693 feet, you will find 77, the square yards contained therein.

Proof by division.

Proof by multiplication.

9)698(77

77

63

9

63

693

63

0

By this example you will find any number of square or superficial yards, not exceeding 180 or 1620 feet, being the extent of this table; or higher numbers, by proper attention, may be easily found, by doubling any two numbers in the table, or by adding two, three, or more numbers together, so as to make up the numbers required, and add the products together, will give you the true contents in square yards. One example will be fully sufficient: Suppose your dimensions to be 3,460 feet, to find the square yards contained therein.

Seek in the table of feet for 1000, or the nearest thereto, which is 1008, opposite to which is 112 yards, which number will admit for three times as much, which makes 3024 feet, and consequently 336 yards; there then will want 436 feet, then seek in the table as before, and the nearest to it is 432 feet, and opposite is 48 yards, which being added to the 336 yards before, make 384 yards and four feet over, which may be called half a yard.

## PAINTER'S PRICES.

ALL MATERIALS, AT PER YARD SUPERFICIAL.

	L.	S.	D.
Common colours, once in oil, at per yard superficial.....	0	0	4
Twice do. ....	0	0	6 $\frac{1}{2}$
Three times, do. ....	0	0	9
Four times, do. ....	0	0	11 $\frac{1}{2}$
Inside, do. primed in size, and twice in oil, do. ....	0	0	7 $\frac{1}{2}$
Second colour and finished, knotting included, do. ....	0	0	8 $\frac{1}{2}$
Clear coal, and finished do. ....	0	0	5 $\frac{1}{2}$
On stucco, once in oil, ....	0	0	5
Do. twice in oil, ....	0	0	7
Do. three times do. ....	0	0	10
Do. four times, do. ....	0	1	0 $\frac{1}{2}$
Do. and sanded, do. ....	0	1	9
Work done off Ladder extra from 2d. to ....	0	0	6
String boards, newels, balusters, and hand rails, do. from 2d. to.....	0	0	6

## SASH FRAMES.

Once in oil, each.....	0	0	10
Do. twice in do. ....	0	1	2
Do. three times in do. ....	0	1	8
Sash squares, once in do. per dozen.....	0	1	0

	L.	S.	D.
Do. twice in do. ....	0	1	4
Do. three times in do. ....	0	1	10
Three times in oil, and flated dead white. ....	0	1	3
Sash square, dead white, three times in oil, per dozen ...	0	2	4
Inside squares, clear coal, and finished, per dozen ...	0	1	2
Window light, three times in oil, each ...	0	0	9
Casements do. ....	0	0	4
Spring stays to do. ....	0	0	2
Iron bars, do. ....	0	0	2
Window cills, once in oil, do. ....	0	0	5
Do. twice in do. ....	0	0	8
Do. three times in do. ....	0	0	11
Single cornice, three times in oil, inside at per foot run ..	0	0	2
Do. and facia, do. ....	0	0	2½
Do. double do. ....	0	0	3
Single cornice, and facia outside, do. ....	0	0	4
Double do large ...	0	0	7
Base and surbase mouldings, do. ....	0	0	2

## SKIRTING,

## PER FOOT RUNNING.

Clear coal, once in oil, width of a board ...	0	0	1
Do. twice do. ....	0	0	2
Do. three times do. ....	0	0	2½
Water trunks, once do. ....	0	0	1½
Do. twice, do. ....	0	0	2½
Do. three times do. ....	0	0	3½
Moulded hand-rail, like mahogany do. add. ....	0	0	2½
Do. grained and varnished do. add. ....	0	0	4
Four-inch reveals to window, once in oil. ....	0	0	1
Do. twice do. ....	0	0	1½
Do. three times do. ....	0	0	2
Cloakpins, twice in do. ....	0	0	2
Stone string and windows cills, &c. once. ....	0	0	2
Edge of stone coping, do. ....	0	0	2
Do. twice. ....	0	0	3
Do three times. ....	0	0	4
Sash squares, painted black, each. ....	0	0	3
Chequers for ale-houses, per dozen ...	0	0	9

N.B. All the above prices are for common colours.

## RICH COLOURS IN OIL.

Twice in oil grey, per yard. ....	0	0	8½
Three times do. do. ....	0	0	11
Four times do. do. ....	0	1	1½
Twice in blue do. do. ....	0	0	9½
Three times do. do. ....	0	1	0
Four times do. do. ....	0	1	2½
Twice in oil green, do. ....	0	0	10½
Three times do. do. ....	0	1	1
Four times do. do. ....	0	1	3½
Twice in oil, grained wainscot, do. add. ....	0	2	3
Do. and varnished, do. add. ....	0	3	0
Twice in oil, grained mahogany, do add. ....	0	2	9
Do. and varnished, do. ....	0	3	6

## DEAD WHITE AND RICH COLOURS, FLATED.

	L.	S.	D.
Best Nottingham lead, once in oil, and flated dead white,			
per yard .....	0	0	10
Twice in oil do. ....	0	1	0 $\frac{1}{2}$
Three times do. ....	0	1	3
Four times do. ....	0	1	5 $\frac{1}{2}$
Once in oil do. to carved work, per foot super-extra ....	0	0	5
Twice in oil ditto. ....	0	0	6
Three times in do. do. ....	0	0	7 $\frac{1}{2}$
Four times in do. do. ....	0	0	8 $\frac{1}{2}$
Twice in do. and flated French grey do. ....	0	1	3 $\frac{1}{2}$
Three times in do. do. ....	0	1	6
Four times in do. do. ....	0	1	8 $\frac{1}{2}$
Twice in ditto, and flated blue, do. ....	0	1	6
Three times in do. do. ....	0	1	8 $\frac{1}{2}$
Four times in do. do. ....	0	1	10 $\frac{1}{2}$
Twice in do. or flated green, do. ....	0	1	8
Finished French grey, olive green, or other rich colours,			
add per yard ....	0	0	5
Patent green, or others of equal value. ....	0	0	8
Three times in do. and do. ....	0	1	11
Four times in do. and do. ....	0	2	2
Do. with verdigrease green, do. ....	0	2	3
Twice in oil and flated, window fronts and doors, the			
pannels, rails, and stiles, white and green do. ....	0	1	10
Putty, per pound, ....	0	0	6
White lead, do. ....	0	0	9
Brushes, each ....	0	3	0
Tools ....	0	1	2
Painter, a day ....	0	6	0
Double size, used for painting new work first over, at per			
firkin ....	0	7	6
Double size, used for painting new work first over, at per			
quart ....	0	0	5
Single size, at per firkin ....	0	3	6

## PLUMBER'S WORK.

## ALL MATERIALS.

Cast lead in sheets for flats, gutters, &c. at per cwt. of			
112 pounds — — — — — to	1	18	0
Do. in flats or gutters solder, labour, nails, and wall			
hooks, per do. — — — — — to	2	1	0
Lead cistern heads to take water from gutters, circular,			
oval or square cast, with outside ornaments, at			
per cwt. — — — — —	2	6	0
Do. with solder, labour, and holdfasts, &c. and fixed			
up do. — — — — —	2	10	0
Lead water cisterns, ornamented, at per cwt. — —	2	10	0

	L.	s.	D.
Milled lead in flats, gutters, hyps, ridges, and flashings, &c. 6lb. to the foot and under — — — to	2	0	0
Do. laying, solder, and labour, and nailsto hyps and ridges included — — — — — — —	2	3	0
Cast-lead sash weights, and other such like things, per lb. — — — — — — —	0	0	6
Re-casting old lead and laying it on flats or gutters, per cwt. — — — — — — —	0	11	0
The price for old lead now is per hundred	1	2	0
NB. Deduct in old lead four pounds per hundred, for dirt.			
Solder per pound is now — — — — —	0	1	0
Allow for old lead in exchange, per cwt. — to	1	9	0
N. B. The laying down of lead is charged by the day.			
N.B. The Plumbers usually cast their lead for gutters, &c. from 7 to 10 pounds to the foot square.			
N.B. Pig lead per ton, ready money, at the scale, 1825. — — — — — — —	28	0	0
Ditto per hundred weight— — — — —	1	8	0
3 Inch rain water pipes, per foot — — — — —	0	3	0
3½ Inch do. do.— — — — —	0	3	6
4 Inch do. do.— — — — —	0	4	0
3 Inch pump handle and rod— — — — —	3	12	6
3½ Inch do. do. — — — — —	4	0	0
4 Inch do. do.— — — — —	4	14	6
1½ Inch best butlers S stink-traps, with brass screw waster complete— — — — —	0	18	0
3 Inch best kitchen or scullery do. do.— — —	1	8	0
N.B. The soldering of water pipe joints, are from 3s. each to 15s. each, according to the bore of the pipe.			

## DAY WORK.

Plumber per day — — — — —	0	6	0
Labourer per day — — — — —	0	4	0
Solder per pound — — — — —	0	1	0
Wall hooks each — — — — —	0	0	2

## A TABLE

Of the weight of Leaden Pipes, according to their size.

Pipes of $\frac{3}{4}$ inch bore, weigh—lb. 10 to the yard	0	4	6
Do. 1 inch do. — — — — 12 do.— — —	0	5	6
Do. 1½ do. — — — — 16 do.— — —	0	6	6
Do. 1½ do. — — — — 18 do.— — —	0	9	0
Do. 1½ do. — — — — 21 do.— — —	0	11	4
Do. 2 do. — — — — 24 do.— — —	0	14	3

N.B. It will be to little purpose to urge what common sense allows, that lead pipes are cheaper or dearer in proportion to their dimensions and thicknesses, and consequently to the price of lead and the allowance in weight that is made to every foot or yard in length, as is also the soldering of the joints from  $\frac{1}{4}$  inch bore to 7 inches at per joint.

There are fourteen different prices, according to their sizes, for soldering water pipes.

### A SHORT USEFUL TABLE IN BUYING OR SELLING LEAD.

As lead has never been above 2l. 2s. per cwt. in the pig, and old lead not less than 14s. per cwt. I will begin with the high price, and decrease to 14s. per cwt.

L.	s.	D.							D.
2	2	0	per cwt. is—	—	—	—	—	—	4 $\frac{1}{2}$
1	19	8	do. —	—	—	—	—	—	4 $\frac{1}{2}$ do.
1	17	4	do. —	—	—	—	—	—	4 do.
1	15	0	do. —	—	—	—	—	—	3 $\frac{3}{4}$ do.
1	12	8	do. —	—	—	—	—	—	3 $\frac{1}{2}$ do.
1	10	4	do. —	—	—	—	—	—	3 $\frac{1}{4}$ do.
1	8	0	do. —	—	—	—	—	—	3 do.
1	5	8	do. —	—	—	—	—	—	2 $\frac{3}{4}$ do.
1	3	4	do. —	—	—	—	—	—	2 $\frac{1}{2}$ do.
1	1	0	do. —	—	—	—	—	—	2 $\frac{1}{4}$ do.
0	18	8	do. —	—	—	—	—	—	2 do.
0	16	4	do. —	—	—	—	—	—	1 $\frac{3}{4}$ do.
0	14	0	do. —	—	—	—	—	—	1 $\frac{1}{2}$ do.

Stop cocks, ball cocks, brass cock and bosses, valves, ferrools funnels, washers and wasters, are so various in sizes and prices, and difficult in explanation, but to the trade, that it is best entirely to omit them.

### GLAZIER'S WORK AND PRICES.

#### ALL MATERIALS.

Allowed by the Master, Wardens, and Court of Assistants, of the Worshipful Company of Glaziers, London.

#### IN NEW SASHES,

Best Newcastle crown, in squares not exceeding 3 feet,			
per foot .....	0	4	0
Do. 2 feet 6 inches, do. ....	0	3	6
Do. 2 feet, do. ....	0	3	2
Do. under 2 feet, do. ....	0	3	0

## SECONDS

	L.	s.	D
Seconds Newcastle crown, in squares not exceeding 3 feet, per foot.....	0	3	6
Do. 2 feet 6 inches, do. ....	0	2	2
Do. 2 feet, do. ....	0	2	8
Do. under 2 feet, do. ....	0	2	6

## THIRDS

Third Newcastle crown, in squares not exceeding 3 feet per foot .....	0	3	0
Do. 2 feet 6, do. ....	0	2	8
Do. 2 feet do. ....	0	2	3
Do. under 2 feet do. ....	0	2	0

## GROUND GLASS.

In squares not exceeding 3 feet, per foot .....	0	5	6
Do. 2 Feet and not exceeding 2 feet 6 inches.....	0	4	8
Do. under 2 feet, ditto.....	0	4	6

## GREEN GLASS.

In new sashes, per foot.....	0	1	6
Old glass at the risk of the employer, per foot .....	0	0	7

## NEWCASTLE CROWN GLASS STOPPED IN OLD SASHES.

Squares not exceeding 3 feet, per foot .....	0	4	0
Ditto 2 feet 6, do. ....	0	3	8
Do. 2 feet, do. ....	0	3	2
Do. under 2 feet, do. ....	0	3	0
Ground glass stopped in old sashes, do. ....	0	5	0
Green do. do. do. ....	0	2	0

## LEAD LIGHTS, CROWN OR GREEN GLASS.

In quarries or squares, 6 by 4, per foot .....	0	1	6
In squares, above 6 by 4, and under 8 by 6, do. ....	0	1	8
In do. 8 by 6, to 10 by 8 .....	0	1	11

## QUARRIES AND SQUARES STOPPED IN OLD LIGHTS.

Quarries, each .....	0	0	4
Squares, under 7 by 5, do. ....	0	0	5
Do. 7 by 5 to 8 by 6, do. ....	0	0	8
Do. 8 by 6 to 9 by 7 .....	0	1	0
Do. above 9 by 7 to 10 by 8, do .....	0	1	3
New leading old lights, per foot .....	0	0	9
Repairing and part leading do. do. ....	0	0	0
Cementing lights, do. ....	0	0	3
Casements pinned in, each .....	6d to	0	0
Puttying windows or skylights both sides, per dozen squares .....	0	1	0
Do. one side only, do. ....	0	0	8

# GLAZIER'S WORK AND PRICES.

139

	L.	S.	D.
Cleaning windows, common size, each .....	0	0	6
Do. Venetian, common size, do. ....	0	1	0
Cleaning lead lights, common size, ditto .....	0	0	3

Bent glass, plain glass, German sheet and moulded glass, to be specially agreed for according to the sizes.

Work done in churches, public buildings, &c. to be valued according to the labour and difficulty in executing the same.

N. B. Windows containing more than twelve squares each, to be charged extra.

N. B. Work done in churches, public buildings, &c. to be valued according to the labour and difficulty in executing the same.

N. B. The glaziers generally reckon that 50 pounds weight of turned lead is sufficient for 100 feet of quarry glass.

N. B. In measuring circular or oval windows, take the same length and breadth as their diameters, as if square windows, because in cutting out the glass there is a great waste, and much more time expended therein, than if they had been square windows.

It must also be observed, that if larger panes of glass are wanted than above described, they advance in price.

## SMITHS WORK AND PRICES.

Iron pallisadoes, chimney bars, and other large hammered work, at 32s. to 56s. per hundred of 112 lbs. or per lb. ....	4d. to	0	0	5
Smaller hammered Iron work, do. ....		0	0	7
Iron doors and shutters .....		0	0	10
Ash grates, casements, cross window and saddle bars, do. ....		0	0	9
Pins, hoops, chains, hooks, pump work, bolts, wrought Iron doors, with pannels, &c. and window shutters, do. ....		0	0	10
All ornamented iron-work, as ballusters to stairs, scrolls, gates, lamp irons, brackets, balconies, &c. from 10d. per pound to .....		0	1	6
Cast iron rails, (top bar hammered), sash weights, &c. from 16s. per cwt. to .....		1	12	0
Large iron castings, such as dyers, soap makers, glue-makers, &c. pans, are from 16s. per cwt. to .....		1	8	0
Cast iron rutts for rail road from 12l. to 15l. per ton, delivered in London; but much cheaper, if used near where cast, and according to distance by either land or water carriage.				

As to the price of nails, hinges, latches, locks, bolts, &c. &c. &c. (which are almost innumerable) it would not only be tedious to give the particulars, but would also be of little use or satisfaction to the employer or employed; those who have occasion for a quantity, may have a catalogue from the wholesale ironmongers, with the lowest prices thereof, or you may charge one sixth more than the prime cost on the ironmonger's bill as a fair and just profit. A small specimen of the numerous sorts of ironmongery goods, with their names and sizes, as follows:

## SLATER'S WORK AND PRICES.

## ALL MATERIALS.

Slating with the best large Westmorland slates on boards, and 4d. clout nails, per square .....	3	19	0
Do. on oak or double fir laths, inside pointed lime and hair, do.....	4	7	0
Old do. ripped and relaid, do....	0	18	0
Slating with Tavistock slates on boards, do.....	2	8	0
Do. on oak or double fir laths, and inside, pointed do. do. ....	2	14	0
Do. ripped and relaid, do. ....	1	0	0
Do. and made good with new slates, do. ....	1	6	0
Slating with large Welch slates on boards, do Imperials..	3	14	0
Do. on oak or double fir, and pointed inside, do. ....	3	18	0
Old do. ripped and relaid, do. ....	0	18	0
Do. and made good with new slates, do. ....	1	6	0
Slating on boards with Welch ladies, as they are called, do. ....	2	4	0
Do. on do. with the larger Welch rag, (Duchess's) do. ....	2	12	0
Do. Queen's, or very large do. ....	3	0	0
Do. Countesses.....	2	8	0
Doubles slating, on boards, do. ....	2	2	0
Do. on oak or double fir laths and pointed inside, do....	2	10	0
Patent slating do.....	4	0	0
N. B. All expence of moving, carriage, &c. is paid for extra, from 3s. to 5s. per square.			
Westmorland and Welch slates, per ton.....5l. 16s. to	6	15	0
Cutting, squaring, and holeing slates, per thousand.....	0	5	0
Ripping, slating, and carrying down rubbish, per square.....	0	3	0
Labour only, per square, to slating.....	0	9	0
N. B. A ton of slate will complete two squares of slating			

## DAY WORK.

A slater, per day.....	0	5	9
A labourer, per day .....	0	3	9
Cement per pound .....	0	1	0
Large scantling slates, per foot superficial, 8d. to ....	0	1	0
Ladies, each .....	0	0	3
Countesses ditto .....	0	0	5
Duchess's ditto .....	0	0	6
Ribing, per foot run.....	0	0	5
Lime and Hair, per hod.....	0	1	0
4d. clout nails, per hundred.....	0	0	6
6d. do. do. ....	0	0	9

## PAVIOR'S WORK AND PRICES.

## ALL MATERIALS.

Purbeck paving squares, four-inch thick, bedded in screened gravel, and jointed with mortar, per yard.....	0	5	0
Do. the squares five inches deep, at per yard .....	0	6	0
Do. the squares six inches deep, do. ....	0	6	8
Do. taken up and repaved, gravel, mortar and labour, do. ....	0	1	0

New Guernsey or Jersey pebble paving, fourteen inches deep, gravel and labour completed, at per do. ....	0	6	0
Do. and the pebbles not to be less than 15 inches deep, do. ....	0	8	0
Do. and the pebbles not to be less than 16 to 18 inches deep, do. ....	0	9	0
N.B. The 14 inches pebbles to weigh 5 cwt. to a yard: the 15 inches 6 cwt. and 16 inches 7 cwt. to 8 cwt. per yard.			
Smaller pebble paving in pannels, new, at per yard.....	0	5	0
New Kentish rag paving, at per do. ....	0	3	0
Do. or pebble paving taken up and repaved, and labour, gravel, do. ....	0	1	0
Guernsey, or Aberdeen granate paving, with screened gravel, the stone nine inches deep, and the bottom to contain four-fifths of the top superficies, and from three to five inches wide at top, and six inches the channels, per yard .....	0	10	6
Do. and all the stones not less than 8 inches deep, do. ....	0	10	0

### MASTER PAVIOR'S CHARGE, FOR DAY WORK.

A pavior, per day .....	0	5	0
A labourer, per day .....	0	3	6
Screened gravel, per load, being a yard cube .....	0	6	0
Guernsey or Jersey pebbles, per ton ..	1	4	0
Kentish rag stone, per ton .....	0	15	0
Aberdeen or Guernsey granate, do. ....	1	6	0

### JOURNEYMEN PAVIOR'S WORK AND PRICES, LABOUR ONLY.

New Purbeck squares, per yard, 4 inches thick .....	0	0	7
Do. and find gravel .....	0	1	0
New Purbeck squares, per yard six inches thick .....	0	0	9
Do. old work repaved .....	0	1	0
New pebble paving, 14 or 16 inches deep, do. ....	0	0	10
Small pebble paving do. ....	0	1	0
Guernsey or Aberdeen granate street paving, do. ....	0	1	0

### COPPER COVERINGS TO ROOFS.

Flats, and gutters, every expence of carriage, labour and nails included			
If the weight of the copper in sheets so intended to be laid, is 12 ounces to the square foot .....	0	1	7
If 14 ounces to the square foot .....	0	1	10
If 16 ounces to the square foot .....	0	2	1
Copper pipes, two inch and a quarter bore, at per foot run	0	1	9
Do. three inch do. at do. ....	0	2	3
Do. three inch and a half do. at do. ....	0	2	9
Copper in sheets, per pound, avoirdupoise .....	0	1	8
Patent tinned copper coverings in sheets, 16 oz. to the foot square, at per foot .....	0	3	2
Do. 18 oz. to do. at per do. ....	0	3	5

Do. 20 oz. to do. at per do. ....	0	3	10
Do. at any weight, at per pound .....	0	2	4
N.B. Forty-eight inches by 24 inches, weighs 8 pounds per sheet and upwards.			
Copper sheets of 1 pound to the square foot, are equal in strength to lead of 10 pounds to the foot.			

### PAPER HANGING.

There is almost as great a variety of prices as there are patterns, consequently I am precluded the means of adopting any general system by which the expence can be ascertained; yet, as it might appear negligent entirely to omit the article of paper in this work, I have introduced it with a few observations.

	L.	S.	D.
Paper of the most inferior quality, per yard .....	0	0	4
Hanging the above, per piece of 12 yards, including paste and labour .....	0	1	4
Bordering do. per dozen yards, including paste and la- bour .....	0	0	5
	0	0	7

Papers of greater value, and India paper, are paid extra for hanging above the aforesaid prices, according to their expence and difficulty of matching the patterns, as is the bordering also.

N.B. To know the quantity of paper to hang any room, the paper by Act of Parliament is 20 inches wide, therefore divide the number of superficial feet by 5, will produce the number of yards of paper to paper the room.

### THATCHER'S WORK AND PRICES.

Thatching with straw work, and all materials, per square	0	19	C
Workmanship only, per square .....	0	7	3
Thatching with reed, per square, finding all materials ..	2	8	0
Workmanship only, per square .....	0	9	8

N.B. One square of straw thatching will take one-third of a load of wheat straw, one bundle of laths, 40 withes, or instead of that, 1 pound of rope yarn, 40 thatching rods.

Price of bolts of reed each .....	0	0	8
One hundred bolts of reeds .....	3	3	0
N.B. Fifty bolts of reeds will complete a square of thatching of 100 square feet.			

1 Load of wheat straw will thatch .....	1	square s
1 Bundle of laths will do. ....	1	do.
1 Pound of rope yarn will do. ....	1	do.
250 Nails will do. ....	1	do.
100 Withes will do. ....	3	do.
100 Thatching rods will do. ....	8	do.

THE  
**READIEST RECKONER,**

OR

**TABLES**

FOR

SUPERFICIAL AND SOLID MEASUREMENTS,

AND

*ASCERTAINING THE PRICE PER FOOT*

OF

**VARIOUS SCANTLINGS.**

---

**BY JAMES ADAMS.**

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LONDON:

PRINTED FOR BALDWIN, CRADOCK, AND JOY,  
*Paternoster Row.*

THE

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TABLES

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LONDON:

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## CONTENTS.

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### TABLE I.

Contains the products of fractional numbers from 1 to 15, their common difference being one quarter of an inch, and the product of the whole number from 1 to 20, their common difference being unity.

### TABLE II.

Contains the squares of all numbers from 1 to 52, their common difference being one quarter of an inch.

### TABLE III.

Shews the solid content of any piece of stone or timber from 1 to 50 feet in length, the area of the base being any number of square inches from 1 to 160; or the length may be considered from 1 to 160, and the area of the base from 1 to 50.

### TABLE IV.

Shews the solid content of any piece of stone or timber from 1 to 50 feet in length, the area of the base being from 100 to 2000, the common difference being 100 square inches.

### TABLE V.

Exhibits the price of *One Foot in length* of any piece of timber whose base is from 1 to 50 square inches, and the price per foot cube, from One Shilling and Sixpence to Eight Shillings.

Should the lengths of the scantlings contain Feet and Inches, the contents for the inches may be readily obtained by taking a proportional part of the content corresponding to *one Foot in length* in Table the Third.

The numbers in the First and Second Tables may be considered as Feet and Inches, or Inches and Parts of an Inch. The products are calculated to the *nearest inch*, or nearest parts of an inch.

Tables the Third and Fourth are calculated to the *nearest inch*, and will give results sufficiently near the truth for any practical purpose

# CONTENTS.

TABLE I.

Contains the products of fractional numbers from 1 to 16, their common difference being one quarter of an inch, and the product of the whole number from 1 to 20, their common difference being unity.

TABLE II.

Contains the squares of all numbers from 1 to 32, their common difference being one quarter of an inch.

TABLE III.

Shows the solid content of any piece of stone or timber from 1 to 60 feet in length, the area of the base being any number of square inches from 1 to 100; or the length may be considered from 1 to 100, and the area of the base from 1 to 50.

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Tables the Third and Fourth are calculated to the nearest inch, and will give results sufficiently near the truth for any practical purpose.

	1	1 1/2	1 1/4	2 1/4	2 1/2	2 3/4	3 1/4	3 1/2	3 3/4
1 1/4	18.5	22.2	25.10	33.2	36.11	40.7	47.11	51.8	55.4
1 1/2	18.2	21.9	25.5	32.8	36.3	39.11	47.2	50.9	54.5
1 3/4	17.10	21.5	24.11	32.1	35.8	39.2	46.4	49.11	53.5
2 1/4	17.2	20.8	24.1	30.11	34.5	37.10	44.8	48.2	51.75
2 1/2	16.11	20.3	23.8	30.5	33.9	37.2	43.11	47.3	50.85
2 3/4	16.7	19.11	23.2	29.10	33.2	36.5	43.1	46.5	49.85
3 1/4	15.11	19.2	22.4	28.8	31.11	35.1	41.5	44.8	47.10
3 1/2	15.8	18.9	21.11	28.2	31.3	34.5	40.8	43.9	46.11
3 3/4	15.4	18.5	21.5	27.7	30.8	33.8	39.10	42.11	45.11
4 1/4	14.8	17.8	20.7	26.5	29.5	32.4	38.2	41.2	44.1
4 1/2	14.5	17.3	20.2	25.11	28.9	31.8	37.5	40.3	43.1
4 3/4	14.1	16.11	19.8	25.4	28.2	30.11	36.7	39.5	42.2
5 1/4	13.5	16.2	18.10	24.2	26.11	29.7	34.11	37.7	40.4
5 1/2	13.2	15.9	18.5	23.8	26.3	28.11	34.2	36.9	39.5
5 3/4	12.10	15.5	17.11	23.1	25.8	28.2	33.4	35.11	38.5
6 1/4	12.2	14.8	17.1	21.11	24.5	26.10	31.8	34.2	36.7
6 1/2	11.11	14.3	16.7	21.5	23.9	26.2	30.11	33.3	35.8
6 3/4	11.7	13.11	16.2	20.10	23.2	25.5	30.1	32.5	34.8
7 1/4	10.11	13.2	15.4	19.8	21.11	24.1	28.5	30.8	32.10
7 1/2	10.8	12.9	14.11	19.2	21.3	23.5	27.8	29.9	31.11
7 3/4	10.4	12.5	14.5	18.7	20.7	22.8	26.10	28.11	30.11
8 1/4	9.8	11.8	13.7	17.5	19.5	21.4	25.2	27.2	29.1
8 1/2	9.5	11.3	13.2	16.11	18.9	20.8	24.5	26.3	28.2
8 3/4	9.3	10.11	12.8	16.4	18.2	19.11	23.7	25.5	27.2
9 1/4	8.5	10.2	11.10	15.2	16.11	18.7	21.11	23.8	25.4
9 1/2	8.2	9.9	11.5	14.8	16.3	17.11	21.2	22.9	24.5
9 3/4	7.10	9.5	10.11	14.1	15.8	17.2	20.4	21.11	22.5
10 1/4	7.2	8.8	10.1	12.11	14.5	15.10	18.8	20.2	21.7
10 1/2	6.11	8.3	9.8	12.5	13.9	15.2	17.11	19.3	20.8
10 3/4	6.7	7.11	9.2	11.10	13.2	14.5	17.1	18.8	19.8
11 1/4	5.11	7.2	8.4	10.8	11.11	13.1	15.5	16.8	17.10
11 1/2	5.8	6.9	7.10	10.2	11.3	12.5	14.8	15.11	16.11
11 3/4	5.4	6.5	7.5	9.7	10.8	11.11	13.1	14.11	15.11
12 1/4	4.8	6.8	6.7	8.5	9.5	10.4	12.2	13.2	14.1
12 1/2	4.5	6.3	6.2	7.11	8.9	9.8	11.5	12.5	13.3
12 3/4	4.1	4.11	5.8	7.4	8.2	8.11	10.7	11.5	12.3
13 1/4	3.5	4.2	4.10	6.2	6.11	7.7	9.8	10.5	11.3
13 1/2	3.2	3.9	4.5	5.5	5.3	6.6	8.6	9.3	10.1
13 3/4	2.10	3.5	3.11	5.1	5.1	6.1	7.11	7.11	8.1
14 1/4	2.2	2.8	3.3	4.3	4.1	5.1	6.1	6.1	7.1
14 1/2	1.11	2.3	3.1	3.1	3.1	4.1	5.1	5.1	6.1
14 3/4	1.7	2.1	2.7	3.1	3.1	4.1	5.1	5.1	6.1

TABLE I.

4	4	4	5	5	5	6	6	6	7	7	7	8	8	8	9	9	9	10	10	10	11	11	11	12	12	12	13	13	13	14	14	14																																																																																																																																																																																																																																																																																																																																																																						
62.8	66.5	70.1	77.5	81.2	84.10	92.3	95.11	99.7	106.11	110.8	114.4	121.8	125.5	129.1	136.5	140.2	143.10	151.2	154.11	158.7	165.11	169.8	173.4	180.8	184.5	188.1	195.5	199.2	202.10	210.2	213.11	217.7																																																																																																																																																																																																																																																																																																																																																																						
61.8	65.3	68.11	76.2	79.9	83.5	90.8	94.3	97.11	105.2	108.9	112.5	119.8	123.3	126.11	134.2	137.9	141.5	148.8	152.3	155.11	163.2	166.9	170.5	177.8	181.3	184.11	192.2	195.9	199.5	206.8	210.3	1																																																																																																																																																																																																																																																																																																																																																																						
60.7	64.2	67.8	74.10	78.5	81.11	89.1	92.8	96.2	103.4	106.11	110.5	117.7	121.2	124.8	131.10	135.5	138.11	146.1	149.8	153.2	160.4	163.11	167.5	174.7	178.2	181.8	188.10	192.5	195.11	203.1	4	2																																																																																																																																																																																																																																																																																																																																																																						
58.5	61.11	65.4	72.2	75.8	79.18	87.11	89.5	92.10	99.8	103.2	106.7	113.5	116.11	120.4	127.2	130.8	134.1	140.11	144.5	147.10	154.8	158.2	161.7	168.5	171.11	175.4	182.9	186.2	189.1	9	6	3																																																																																																																																																																																																																																																																																																																																																																						
57.5	60.9	64.2	70.11	74.3	77.8	84.5	87.9	91.2	97.11	101.3	104.8	111.5	114.9	118.2	124.11	128.3	131.8	138.5	141.9	145.2	151.11	155.3	158.11	165.5	168.9	172.2	178.11	182.3	16	12	8	4																																																																																																																																																																																																																																																																																																																																																																						
56.4	59.8	62.11	69.10	72.11	76.2	82.10	86.2	89.5	96.1	99.5	102.8	109.4	112.8	115.11	122.7	125.11	129.2	135.10	139.2	142.5	149.1	152.5	155.8	162.4	165.8	168.11	175.7	25	20	15	10	5																																																																																																																																																																																																																																																																																																																																																																						
54.2	57.5	60.7	66.11	70.2	73.4	79.8	82.11	86.1	92.5	95.8	98.10	105.2	108.5	111.7	117.11	121.2	124.4	130.8	133.11	137.1	143.5	146.8	149.10	156.2	159.5	162.7	36	30	24	18	12	6																																																																																																																																																																																																																																																																																																																																																																						
53.2	56.3	59.5	65.8	68.9	71.11	78.2	81.3	84.5	90.8	93.9	96.11	103.2	106.3	109.5	115.8	118.9	121.11	128.2	131.4	134.5	141.8	144.9	147.11	153.2	156.3	49	42	35	28	21	14	7																																																																																																																																																																																																																																																																																																																																																																						
52.1	55.2	58.2	64.4	67.5	70.5	76.7	79.8	82.8	88.10	91.11	94.11	101.1	104.2	107.2	113.4	116.5	119.5	125.7	128.8	131.8	137.10	140.11	143.11	150.1	64	56	48	40	32	24	16	8																																																																																																																																																																																																																																																																																																																																																																						
49.11	52.11	55.10	61.8	64.8	67.7	73.5	76.5	79.4	85.2	88.2	91.1	96.11	99.11	102.10	108.8	111.8	114.7	120.5	123.5	126.4	132.3	135.2	138.1	81	72	63	54	45	36	27	18	9																																																																																																																																																																																																																																																																																																																																																																						
46.11	49.9	52.8	60.5	63.3	66.2	71.11	74.9	77.8	83.5	86.5	89.2	94.11	97.9	100.8	106.5	109.3	112.2	117.11	120.9	123.8	129.5	132.3	100	90	80	70	60	50	40	30	20	10																																																																																																																																																																																																																																																																																																																																																																						
47.10	50.8	53.5	59.1	61.11	64.8	70.4	73.2	75.11	81.7	84.5	87.2	92.10	95.8	98.5	104.1	106.11	109.8	115.4	118.2	120.11	126.7	129.5	132.3	100	90	80	70	66	55	44	33	22	11																																																																																																																																																																																																																																																																																																																																																																					
45.8	48.5	51.1	56.3	59.2	61.10	67.2	69.11	72.7	77.11	80.8	83.4	88.8	91.5	94.1	99.5	102.2	104.10	110.2	112.11	115.7	121.1	124.1	127.1	132.1	135.1	140.1	143.1	148.1	153.1	158.1	163.1	168.1	173.1																																																																																																																																																																																																																																																																																																																																																																					
44.8	47.3	49.11	55.2	57.9	60.5	65.8	68.3	70.11	76.2	78.9	81.5	86.8	89.3	91.11	97.2	99.9	102.5	107.8	110.3	114.4	117.11	120.9	123.8	129.5	132.3	135.2	138.1	144.9	147.11	153.2	156.3	162.7	165.8																																																																																																																																																																																																																																																																																																																																																																					
43.7	46.2	48.8	53.4	56.5	58.11	64.1	66.8	69.2	74.4	76.11	79.5	84.7	87.2	89.8	94.10	97.5	99.11	105.1	108.5	111.8	114.7	120.5	123.5	126.4	132.3	135.2	138.1	144.9	147.11	153.2	156.3	162.7	165.8																																																																																																																																																																																																																																																																																																																																																																					
41.5	43.11	46.4	51.2	53.8	56.1	60.11	63.5	65.10	70.3	73.2	75.7	80.5	82.11	85.4	90.2	92.8	95.1	100.3	103.5	106.11	109.8	112.2	117.11	120.9	123.8	129.5	132.3	135.2	138.1	144.9	147.11	153.2	156.3	162.7																																																																																																																																																																																																																																																																																																																																																																				
40.5	42.9	45.2	49.11	52.3	54.8	59.5	61.9	64.2	68.11	71.3	73.8	78.5	80.9	83.2	87.11	90.3	92.8	95.1	100.3	103.5	106.11	109.8	112.2	117.11	120.9	123.8	129.5	132.3	135.2	138.1	144.9	147.11	153.2	156.3	162.7																																																																																																																																																																																																																																																																																																																																																																			
39.4	41.8	43.11	48.7	50.11	53.2	57.10	60.2	62.5	67.1	69.5	71.8	76.4	78.8	80.11	85.7	88.5	90.3	92.8	95.1	100.3	103.5	106.11	109.8	112.2	117.11	120.9	123.8	129.5	132.3	135.2	138.1	144.9	147.11	153.2	156.3	162.7																																																																																																																																																																																																																																																																																																																																																																		
37.2	39.5	41.7	45.11	48.2	50.4	54.8	56.11	59.1	63.5	65.8	67.10	72.2	74.5	76.7	80.9	83.2	85.7	88.5	90.3	92.8	95.1	100.3	103.5	106.11	109.8	112.2	117.11	120.9	123.8	129.5	132.3	135.2	138.1	144.9	147.11	153.2	156.3	162.7																																																																																																																																																																																																																																																																																																																																																																
36.2	38.3	40.5	44.8	46.9	48.11	53.2	55.3	57.5	61.8	63.9	65.11	70.2	72.3	74.5	76.7	80.9	83.2	85.7	88.5	90.3	92.8	95.1	100.3	103.5	106.11	109.8	112.2	117.11	120.9	123.8	129.5	132.3	135.2	138.1	144.9	147.11	153.2	156.3	162.7																																																																																																																																																																																																																																																																																																																																																															
35.1	37.2	39.2	43.4	45.5	47.5	51.7	53.8	55.8	59.10	61.11	63.1	68.1	70.2	72.3	74.5	76.7	80.9	83.2	85.7	88.5	90.3	92.8	95.1	100.3	103.5	106.11	109.8	112.2	117.11	120.9	123.8	129.5	132.3	135.2	138.1	144.9	147.11	153.2	156.3	162.7																																																																																																																																																																																																																																																																																																																																																														
32.11	34.11	36.10	40.8	42.8	44.7	48.5	50.5	52.4	56.7	58.2	60.1	65.1	67.1	69.5	71.8	76.4	78.8	80.11	85.7	88.5	90.3	92.8	95.1	100.3	103.5	106.11	109.8	112.2	117.11	120.9	123.8	129.5	132.3	135.2	138.1	144.9	147.11	153.2	156.3	162.7																																																																																																																																																																																																																																																																																																																																																														
31.11	33.9	35.8	39.5	41.3	43.2	46.11	48.9	50.8	54.5	56.3	58.2	63.1	65.1	67.1	69.5	71.8	76.4	78.8	80.11	85.7	88.5	90.3	92.8	95.1	100.3	103.5	106.11	109.8	112.2	117.11	120.9	123.8	129.5	132.3	135.2	138.1	144.9	147.11	153.2	156.3	162.7																																																																																																																																																																																																																																																																																																																																																													
30.10	32.8	34.5	38.1	39.11	41.8	45.4	47.2	48.11	52.5	54.3	56.2	61.1	63.1	65.1	67.1	69.5	71.8	76.4	78.8	80.11	85.7	88.5	90.3	92.8	95.1	100.3	103.5	106.11	109.8	112.2	117.11	120.9	123.8	129.5	132.3	135.2	138.1	144.9	147.11	153.2	156.3	162.7																																																																																																																																																																																																																																																																																																																																																												
28.8	30.5	32.1	35.5	37.2	38.10	42.2	43.11	45.7	49.5	51.3	53.2	58.1	60.1	62.5	64.7	66.9	69.2	71.5	73.8	76.1	78.4	80.7	83.0	85.3	87.6	89.9	92.2	94.5	96.8	99.1	101.4	103.7	106.0	108.3	110.6	112.9	115.2	117.5	119.8	122.1	124.4	126.7	129.0	131.3	133.6	135.9	138.2	140.5	142.8	145.1	147.4	149.7	152.0	154.3	156.6	158.9	161.2	163.5	165.8	168.1	170.4	172.7	175.0	177.3	179.6	181.9	184.2	186.5	188.8	191.1	193.4	195.7	198.0	200.3	202.6	204.9	207.2	209.5	211.8	214.1	216.4	218.7	221.0	223.3	225.6	227.9	230.2	232.5	234.8	237.1	239.4	241.7	244.0	246.3	248.6	250.9	253.2	255.5	257.8	260.1	262.4	264.7	267.0	269.3	271.6	273.9	276.2	278.5	280.8	283.1	285.4	287.7	290.0	292.3	294.6	296.9	299.2	301.5	303.8	306.1	308.4	310.7	313.0	315.3	317.6	319.9	322.2	324.5	326.8	329.1	331.4	333.7	336.0	338.3	340.6	342.9	345.2	347.5	349.8	352.1	354.4	356.7	359.0	361.3	363.6	365.9	368.2	370.5	372.8	375.1	377.4	379.7	382.0	384.3	386.6	388.9	391.2	393.5	395.8	398.1	400.4	402.7	405.0	407.3	409.6	411.9	414.2	416.5	418.8	421.1	423.4	425.7	428.0	430.3	432.6	434.9	437.2	439.5	441.8	444.1	446.4	448.7	451.0	453.3	455.6	457.9	460.2	462.5	464.8	467.1	469.4	471.7	474.0	476.3	478.6	480.9	483.2	485.5	487.8	490.1	492.4	494.7	497.0	499.3	501.6	503.9	506.2	508.5	510.8	513.1	515.4	517.7	520.0	522.3	524.6	526.9	529.2	531.5	533.8	536.1	538.4	540.7	543.0	545.3	547.6	549.9	552.2	554.5	556.8	559.1	561.4	563.7	566.0	568.3	570.6	572.9	575.2	577.5	579.8	582.1	584.4	586.7	589.0	591.3	593.6	595.9	598.2	600.5	602.8	605.1	607.4	609.7	612.0	614.3	616.6	618.9	621.2	623.5	625.8	628.1	630.4	632.7	635.0	637.3	639.6	641.9	644.2	646.5	648.8	651.1	653.4	655.7	658.0	660.3	662.6	664.9	667.2	669.5	671.8	674.1	676.4	678.7	681.0	683.3	685.6	687.9	690.2	692.5	694.8	697.1	699.4	701.7	704.0	706.3	708.6	710.9	713.2	715.5	717.8	720.1	722.4	724.7	727.0	729.3	731.6	733.9	736.2	738.5	740.8	743.1	745.4	747.7	750.0	752.3	754.6	756.9	759.2	761.5	763.8	766.1	768.4	770.7	773.0	775.3	777.6	779.9	782.2	784.5	786.8	789.1	791.4	793.7	796.0	798.3	800.6	802.9	805.2	807.5	809.8	812.1	814.4	816.7	819.0	821.3	823.6	825.9	828.2	830.5	832.8	835.1	837.4	839.7	842.0	844.3	846.6	848.9	851.2	853.5	855.8	858.1	860.4	862.7	865.0	867.3	869.6	871.9	874.2	876.5	878.8	881.1	883.4	885.7	888.0	890.3	892.6	894.9	897.2	899.5	901.8	904.1	906.4	908.7	911.0	913.3	915.6	917.9	920.2	922.5	924.8	927.1</

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46	46	46	46
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89	89	89	89
90	90	90	90
91	91	91	91
92	92	92	92
93	93	93	93
94	94	94	94
95	95	95	95
96	96	96	96
97	97	97	97
98	98	98	98
99	99	99	99
100	100	100	100

TABLE II.

[illegible]

TABLE III.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1						0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
2			0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
3		0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5
4		0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.6	0.6	0.7
5		0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.8	0.9	0.8	0.8	0.9
6	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	0.9	0.9	0.9	0.10
7	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.8	0.9	0.9	0.10	0.11	0.11	0.10
8	0.1	0.1	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.8	0.9	0.10	0.10	0.11	0.11	0.11	0.10
9	0.1	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.8	0.8	0.9	0.9	0.10	0.11	0.11	0.12	0.12	0.12	0.11
10	0.1	0.2	0.3	0.4	0.5	0.5	0.6	0.7	0.8	0.8	0.9	0.10	0.11	0.11	0.12	0.12	0.13	0.13	0.13	0.12
11	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.7	0.8	0.9	0.10	0.11	0.11	0.12	0.13	0.13	0.14	0.14	0.14	0.13
12	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.10	0.11	0.11	0.12	0.13	0.14	0.14	0.15	0.15	0.15	0.14
13	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.10	0.11	0.11	0.12	0.13	0.14	0.15	0.15	0.15	0.15	0.14
14	0.1	0.2	0.4	0.5	0.6	0.7	0.8	0.9	0.10	0.11	0.11	0.12	0.13	0.14	0.15	0.16	0.16	0.16	0.16	0.15
15	0.1	0.3	0.4	0.5	0.6	0.8	0.8	0.9	0.10	0.11	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.17	0.17	0.16
16	0.1	0.3	0.4	0.5	0.7	0.8	0.9	0.10	0.11	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.18	0.18	0.17
17	0.1	0.3	0.4	0.6	0.7	0.9	0.9	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.19	0.19	0.18
18	0.2	0.3	0.5	0.6	0.8	0.9	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.20	0.20	0.19
19	0.2	0.3	0.5	0.6	0.8	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.21	0.21	0.20
20	0.2	0.3	0.5	0.7	0.8	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.21	0.21	0.20
21	0.2	0.4	0.5	0.7	0.9	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.22	0.22	0.21
22	0.2	0.4	0.6	0.7	0.9	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.22	0.22	0.21
23	0.2	0.4	0.6	0.8	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.22	0.22	0.21
24	0.2	0.4	0.6	0.8	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.22	0.22	0.21
25	0.2	0.4	0.6	0.8	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.22	0.22	0.21

TABLE III.

	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
2	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
3	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.10	0.10	0.10
4	0.7	0.7	0.8	0.8	0.8	0.9	0.9	0.9	0.10	0.10	0.10	0.11	0.11	0.11	1.0	1.0	1.0	1.1	1.1	1.1
5	0.9	0.9	0.10	0.10	0.10	0.11	0.11	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.5
6	0.11	0.11	1.0	1.0	1.1	1.1	1.2	1.2	1.3	1.3	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8
7	1.0	1.1	1.1	1.2	1.3	1.3	1.4	1.4	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.9	1.10	1.10	1.11	1.11
8	1.2	1.3	1.3	1.4	1.5	1.5	1.6	1.7	1.7	1.8	1.9	1.9	1.10	1.11	1.11	2.0	2.1	2.1	2.2	2.3
9	1.4	1.5	1.5	1.6	1.7	1.8	1.8	1.9	1.10	1.11	1.11	2.0	2.1	2.2	2.2	2.3	2.4	2.5	2.5	2.6
10	1.6	1.6	1.7	1.8	1.9	1.10	1.11	1.11	2.0	2.1	2.2	2.3	2.4	2.5	2.5	2.6	2.7	2.8	2.9	2.9
11	1.7	1.8	1.9	1.10	1.11	2.0	2.1	2.2	2.3	2.4	2.4	2.5	2.6	2.7	2.8	2.9	2.10	2.11	3.0	3.1
12	1.9	1.10	1.11	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6
13	1.11	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.10	2.11	3.0	3.1	3.3	3.4	3.5	3.6	3.7	3.8	3.11
14	2.1	2.2	2.3	2.4	2.5	2.6	2.8	2.9	2.10	2.11	3.0	3.1	3.3	3.4	3.5	3.8	3.9	4.0	4.1	4.2
15	2.2	2.4	2.5	2.6	2.7	2.9	2.10	2.11	3.0	3.2	3.3	3.4	3.5	3.7	3.8	3.9	4.0	4.1	4.4	4.5
16	2.4	2.5	2.7	2.8	2.9	2.11	3.0	3.1	3.3	3.4	3.5	3.7	3.8	3.11	4.0	4.2	4.3	4.4	4.7	4.9
17	2.6	2.7	2.9	2.10	2.11	3.1	3.2	3.4	3.5	3.7	3.8	3.9	4.0	4.2	4.3	4.5	4.6	4.8	4.11	5.0
18	2.8	2.9	2.11	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.3	4.4	4.6	4.7	4.9	4.11	5.0	5.2	5.3
19	2.9	2.11	3.0	3.2	3.4	3.5	3.7	3.8	3.10	4.0	4.1	4.3	4.4	4.7	4.9	5.0	5.2	5.3	5.5	5.7
20	2.11	3.1	3.2	3.4	3.6	3.7	3.9	3.11	4.1	4.3	4.5	4.6	4.8	4.10	5.0	5.1	5.3	5.5	5.8	5.10
21	3.1	3.3	3.4	3.6	3.8	3.10	4.1	4.3	4.5	4.7	4.9	4.11	5.1	5.2	5.4	5.6	5.8	5.10	6.0	6.1
22	3.3	3.4	3.6	3.8	3.10	4.0	4.2	4.3	4.5	4.7	4.9	4.11	5.1	5.3	5.5	5.7	5.9	6.1	6.3	6.5
23	3.4	3.6	3.8	3.10	4.0	4.2	4.4	4.6	4.8	4.10	5.0	5.2	5.4	5.6	5.8	5.10	6.0	6.2	6.4	6.6
24	3.6	3.8	3.10	4.0	4.2	4.4	4.6	4.8	4.10	5.0	5.3	5.5	5.7	5.9	5.11	6.1	6.3	6.5	6.7	6.9
25	3.8	3.10	4.0	4.2	4.4	4.6	4.8	4.10	5.0	5.3	5.5	5.7	5.9	5.11	6.1	6.3	6.5	6.7	6.9	6.11



TABLE III.

	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
1	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.10	0.10	0.10	0.10
3	0.10	0.11	0.11	0.11	0.11	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.3	1.3
4	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.7	1.7	1.7	1.8	1.8
5	1.5	1.6	1.6	1.6	1.7	1.7	1.8	1.8	1.8	1.9	1.9	1.10	1.10	1.11	1.11	1.11	1.11	1.11	1.11	1.11
6	1.9	1.9	1.10	1.10	1.11	1.11	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.4	2.5	2.5	2.6	2.6
7	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.5	2.5	2.6	2.6	2.7	2.8	2.8	2.9	2.9	2.10	2.10	2.11
8	2.3	2.4	2.5	2.5	2.6	2.7	2.7	2.8	2.9	2.9	2.10	2.11	2.11	3.0	3.1	3.1	3.1	3.2	3.3	3.4
9	2.7	2.8	2.8	2.9	2.10	2.11	2.11	3.0	3.1	3.2	3.2	3.3	3.4	3.5	3.5	3.6	3.7	3.8	3.9	4.0
10	2.10	2.11	3.0	3.1	3.2	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6
11	3.2	3.3	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
12	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4
13	3.8	3.10	3.11	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6
14	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9
15	4.3	4.5	4.6	4.7	4.8	4.10	4.11	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.2
16	4.7	4.8	4.9	4.11	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5
17	4.10	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8
18	5.2	5.3	5.5	5.6	5.8	5.9	5.11	6.0	6.2	6.3	6.5	6.6	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5
19	5.5	5.7	5.8	5.10	5.11	6.1	6.2	6.4	6.6	6.7	6.9	7.0	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9
20	5.8	5.10	6.0	6.1	6.3	6.5	6.6	6.8	7.0	7.1	7.3	7.4	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3
21	6.0	6.2	6.3	6.5	6.7	6.9	7.0	7.2	7.4	7.5	7.7	7.9	8.1	8.3	8.5	8.7	8.9	9.0	9.1	9.2
22	6.3	6.5	6.7	6.9	7.1	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0	9.2	9.4	9.6	9.8	10.0	10.2
23	6.7	6.9	7.10	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0	9.2	9.4	9.6	9.8	10.0	10.2	10.4
24	7.10	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8
25	7.1	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0	9.2	9.4	9.6	9.8	10.0	10.2	10.4	10.6	10.8	11.0

TABLE III.

	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
1	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7
2	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
3	1.3	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.8
4	1.8	1.9	1.9	1.9	1.9	1.10	1.10	1.11	1.11	1.11	1.11	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.3
5	2.1	2.2	2.2	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.6	2.6	2.6	2.7	2.7	2.8	2.8	2.9	2.9	2.9
6	2.7	2.7	2.8	2.8	2.9	2.9	2.10	2.10	2.11	2.11	3.0	3.0	3.1	3.1	3.2	3.2	3.3	3.3	3.4	3.4
7	3.0	3.0	3.1	3.1	3.2	3.3	3.3	3.4	3.5	3.5	3.5	3.6	3.7	3.7	3.8	3.8	3.9	3.10	3.10	3.11
8	3.5	3.5	3.6	3.7	3.7	3.8	3.9	3.9	3.10	3.11	3.11	4.0	4.1	4.1	4.2	4.3	4.3	4.4	4.5	4.5
9	3.10	3.11	3.11	4.0	4.1	4.2	4.3	4.4	4.5	4.5	4.5	4.6	4.7	4.8	4.8	4.9	4.10	4.11	4.11	5.0
10	4.3	4.4	4.5	4.5	4.6	4.7	4.8	4.9	4.10	4.10	4.11	5.0	5.1	5.2	5.3	5.3	5.4	5.5	5.6	5.7
11	4.8	4.9	4.10	4.11	5.0	5.1	5.2	5.3	5.4	5.5	5.5	5.6	5.7	5.8	5.9	5.10	5.11	6.0	6.0	6.1
12	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	5.10	5.11	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8
13	5.6	5.7	5.8	5.9	5.10	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	6.10	6.11	7.1	7.2	7.3
14	5.11	6.0	6.2	6.3	6.4	6.5	6.6	6.7	6.9	6.10	6.11	7.0	7.1	7.2	7.4	7.5	7.6	7.7	7.8	7.9
15	6.4	6.6	6.7	6.8	6.9	6.11	7.0	7.1	7.2	7.4	7.5	7.6	7.7	7.9	7.10	7.11	8.0	8.2	8.3	8.4
16	6.9	6.11	7.0	7.1	7.3	7.4	7.5	7.7	7.8	7.9	7.11	8.0	8.1	8.3	8.4	8.5	8.7	8.8	8.9	8.11
17	7.2	7.4	7.5	7.7	7.8	7.10	7.11	8.0	8.2	8.3	8.5	8.6	8.7	8.9	8.10	9.0	9.1	9.3	9.4	9.5
18	7.8	7.9	7.11	8.0	8.2	8.3	8.5	8.6	8.8	8.9	8.11	9.0	9.2	9.3	9.5	9.6	9.8	9.9	9.11	10.0
19	8.1	8.2	8.4	8.5	8.7	8.9	8.10	9.0	9.1	9.3	9.4	9.6	9.8	9.9	9.11	10.0	10.2	10.4	10.5	10.7
20	8.6	8.7	8.9	8.11	9.0	9.2	9.4	9.5	9.7	9.9	9.10	10.0	10.2	10.3	10.5	10.7	10.8	10.10	10.11	11.0
21	8.11	9.1	9.2	9.4	9.6	9.9	10.1	10.3	10.5	10.7	10.10	11.0	11.2	11.4	11.5	11.7	11.9	11.11	11.6	11.8
22	9.4	9.6	9.8	9.9	9.11	10.1	10.3	10.5	10.7	10.10	11.0	11.2	11.4	11.5	11.7	11.9	12.1	12.2	12.3	12.4
23	9.9	9.11	10.1	10.3	10.5	10.7	10.10	11.0	11.2	11.4	11.5	11.7	11.9	12.1	12.2	12.4	12.6	12.7	12.9	13.0
24	10.2	10.4	10.6	10.8	10.10	11.0	11.2	11.4	11.6	11.8	12.0	12.2	12.4	12.6	12.8	13.0	13.2	13.4	13.6	13.8
25	10.7	10.9	10.11	11.1	11.3	11.6	11.8	12.0	12.2	12.4	12.6	12.8	13.0	13.2	13.4	13.6	13.8	14.0	14.2	14.4

TABLE III.

	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5
3	1.8	1.9	1.9	1.9	1.9	1.9	1.10	1.10	1.10	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
4	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.6	2.6	2.7	2.7	2.7	2.8	2.8	2.8	2.9	2.9	2.9
5	2.10	2.10	2.11	2.11	2.11	3.0	3.0	3.1	3.1	3.2	3.2	3.2	3.3	3.3	3.4	3.4	3.4	3.5	3.5	3.6
6	3.5	3.5	3.6	3.6	3.7	3.7	3.8	3.8	3.9	3.9	3.10	3.10	3.11	3.11	4.0	4.0	4.1	4.1	4.2	4.2
7	3.11	4.0	4.0	4.1	4.2	4.2	4.3	4.3	4.4	4.5	4.5	4.6	4.6	4.7	4.7	4.8	4.9	4.9	4.10	4.10
8	4.6	4.7	4.7	4.8	4.9	4.9	4.10	4.11	4.11	5.0	5.1	5.1	5.2	5.3	5.3	5.4	5.5	5.5	5.6	5.7
9	5.1	5.2	5.2	5.3	5.4	5.5	5.5	5.6	5.7	5.8	5.8	5.9	5.10	5.11	5.11	6.0	6.1	6.2	6.2	6.3
10	5.8	5.8	5.9	5.10	5.11	6.0	6.1	6.1	6.2	6.3	6.4	6.5	6.6	6.6	6.7	6.8	6.9	7.0	7.1	7.1
11	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	6.10	6.11	6.11	7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8
12	6.9	6.10	6.11	7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	7.10	7.11	8.0	8.1	8.2	8.3	8.4
13	7.4	7.5	7.6	7.7	7.8	7.9	7.10	7.11	8.0	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	8.10	8.11	9.0
14	7.11	8.0	8.1	8.2	8.3	8.4	8.6	8.7	8.8	8.9	8.10	8.11	9.1	9.2	9.3	9.4	9.5	9.6	9.8	9.9
15	8.5	8.7	8.8	8.9	8.10	9.0	9.1	9.2	9.3	9.5	9.6	9.7	9.8	9.10	9.11	10.0	10.1	10.3	10.4	10.5
16	9.0	9.1	9.3	9.4	9.5	9.7	9.8	9.9	9.11	10.0	10.1	10.3	10.4	10.5	10.7	10.8	10.9	11.0	11.1	11.1
17	9.7	9.8	9.10	9.11	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8
18	10.2	10.3	10.5	10.6	10.8	10.9	11.0	11.1	11.2	11.3	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4
19	10.8	10.10	10.11	11.1	11.3	11.4	11.6	11.7	11.9	12.0	12.1	12.2	12.3	12.5	12.6	12.8	12.9	13.0	13.1	13.2
20	11.3	11.5	11.6	11.8	11.10	11.11	11.12	12.1	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3	13.4
21	11.10	12.0	12.1	12.3	12.5	12.7	12.8	12.10	13.0	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2
22	12.5	12.6	12.8	12.10	13.0	13.2	13.4	13.5	13.7	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9
23	12.11	13.1	13.3	13.5	13.7	13.9	14.1	14.3	14.5	14.6	14.8	14.10	15.0	15.2	15.4	15.6	15.8	15.10	16.0	16.2
24	13.6	13.8	13.10	14.0	14.2	14.4	14.6	14.8	14.10	15.0	15.2	15.4	15.6	15.8	16.0	16.2	16.4	16.6	16.8	17.0
25	14.1	14.3	14.5	14.7	14.9	14.11	15.1	15.3	15.5	15.7	15.9	16.1	16.3	16.5	16.7	16.9	17.1	17.3	17.5	17.7

TABLE III.

	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
1	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.10	0.10	0.10	0.10	0.10	0.10	0.10
2	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8
3	2.1	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.6	2.6	2.6
4	2.10	2.10	2.10	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11
5	3.6	3.7	3.7	3.7	3.8	3.8	3.9	3.9	3.9	3.9	3.10	3.10	3.11	3.11	3.11	3.11	3.11	3.11	3.11	3.11
6	4.3	4.3	4.4	4.4	4.5	4.5	4.6	4.6	4.7	4.7	4.8	4.8	4.9	4.9	4.9	4.10	4.10	4.10	4.10	4.10
7	4.11	5.0	5.0	5.1	5.1	5.2	5.2	5.3	5.4	5.4	5.5	5.5	5.6	5.7	5.7	5.8	5.8	5.9	5.9	5.10
8	5.7	5.8	5.9	5.9	5.10	5.11	5.11	6.0	6.1	6.1	6.2	6.3	6.3	6.4	6.5	6.5	6.6	6.7	6.7	6.8
9	6.4	6.5	6.5	6.6	6.7	6.8	6.8	6.9	6.10	6.11	6.11	7.0	7.1	7.2	7.2	7.3	7.4	7.5	7.5	7.6
10	7.0	7.1	7.2	7.3	7.4	7.4	7.5	7.6	7.7	7.8	7.9	7.9	7.10	7.11	8.0	8.1	8.2	8.3	8.4	8.4
11	7.9	7.10	7.10	7.11	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	8.9	8.10	8.11	9.0	9.1	9.2
12	8.5	8.6	8.7	8.8	8.9	8.10	8.11	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	9.10	9.11	10.0
13	9.1	9.3	9.4	9.5	9.6	9.7	9.8	9.9	9.10	9.11	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9
14	9.10	9.11	10.0	10.1	10.3	10.4	10.5	10.6	10.7	10.8	10.10	10.11	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7
15	10.6	10.8	10.9	10.10	10.11	11.0	11.1	11.2	11.3	11.4	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5
16	11.3	11.4	11.5	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3
17	11.11	12.1	12.2	12.3	12.5	12.6	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1
18	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7
19	13.4	13.6	13.7	13.9	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5
20	14.0	14.2	14.4	14.5	14.7	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.3
21	14.9	14.11	15.0	15.2	15.4	15.6	15.7	15.9	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	17.0	17.1
22	15.5	15.7	15.9	16.1	16.3	16.5	16.7	16.9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	18.0	18.1
23	16.2	16.4	16.5	16.7	16.9	17.1	17.3	17.5	17.7	17.9	18.1	18.3	18.5	18.7	18.9	19.1	19.3	19.5	19.7	19.9
24	16.10	17.0	17.2	17.4	17.6	17.8	18.0	18.2	18.4	18.6	18.8	19.0	19.2	19.4	19.6	19.8	20.0	20.2	20.4	20.6
25	17.6	17.9	18.1	18.3	18.5	18.7	18.9	19.1	19.3	19.5	19.7	19.9	20.1	20.3	20.5	20.7	20.9	21.1	21.3	21.5

TABLE III.

	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
1	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	1.0	1.0	1.0
2	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.0	1.0	1.0
3	2.6	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	1.0	1.0	1.0
4	3.4	3.5	3.5	3.5	3.6	3.6	3.6	3.7	3.7	3.7	3.8	3.8	3.8	3.9	3.9	3.9	3.9	1.0	1.0	1.0
5	4.2	4.3	4.3	4.4	4.4	4.5	4.5	4.5	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.9	4.9	1.0	1.0	1.0
6	5.1	5.1	5.2	5.2	5.3	5.3	5.4	5.4	5.5	5.5	5.6	5.6	5.7	5.7	5.8	5.8	5.9	1.0	1.0	1.0
7	5.11	5.11	6.0	6.0	6.1	6.2	6.3	6.3	6.3	6.4	6.4	6.5	6.6	6.6	6.7	6.7	6.8	1.0	1.0	1.0
8	6.9	6.9	6.10	6.11	6.11	7.0	7.1	7.1	7.2	7.3	7.3	7.4	7.5	7.5	7.6	7.7	7.7	1.0	1.0	1.0
9	7.7	7.8	7.8	7.9	7.10	7.11	7.11	8.0	8.1	8.2	8.2	8.3	8.4	8.5	8.5	8.6	8.7	1.0	1.0	1.0
10	8.5	8.6	8.7	8.7	8.8	8.9	8.10	8.11	9.0	9.0	9.1	9.2	9.3	9.4	9.5	9.5	9.6	1.0	1.0	1.0
11	9.3	9.4	9.5	9.6	9.7	9.8	9.8	9.9	9.10	9.11	10.0	10.1	10.2	10.3	10.4	10.5	10.6	1.0	1.0	1.0
12	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	10.10	10.11	11.0	11.1	11.2	11.3	11.4	11.5	1.0	1.0	1.0
13	10.11	11.0	11.1	11.2	11.3	11.5	11.6	11.7	11.8	11.9	11.10	11.11	12.0	12.1	12.2	12.3	12.4	1.0	1.0	1.0
14	11.9	11.10	12.0	12.1	12.2	12.3	12.4	12.5	12.7	12.8	12.9	12.10	12.11	13.0	13.1	13.2	13.3	1.0	1.0	1.0
15	12.7	12.9	12.10	12.11	13.0	13.2	13.3	13.4	13.5	13.7	13.8	13.9	13.10	14.0	14.1	14.2	14.3	1.0	1.0	1.0
16	13.5	13.7	13.8	13.9	13.11	14.0	14.1	14.3	14.4	14.5	14.7	14.8	14.9	14.11	15.0	15.1	15.3	1.0	1.0	1.0
17	14.3	14.5	14.6	14.8	14.9	14.11	15.0	15.1	15.3	15.4	15.6	15.7	15.8	15.10	15.11	16.1	16.2	1.0	1.0	1.0
18	15.2	15.3	15.5	15.6	15.8	15.9	15.11	16.0	16.2	16.3	16.5	16.6	16.8	16.9	16.11	17.0	17.1	1.0	1.0	1.0
19	16.0	16.1	16.3	16.4	16.6	16.8	16.9	16.11	17.0	17.2	17.3	17.5	17.7	17.8	17.10	17.11	18.1	1.0	1.0	1.0
20	16.10	16.11	17.1	17.3	17.4	17.6	17.8	17.9	18.10	18.11	18.2	18.4	18.6	18.7	18.9	18.11	19.0	1.0	1.0	1.0
21	17.8	17.10	17.11	18.1	18.3	18.5	18.6	18.8	18.10	19.0	19.1	19.3	19.5	19.7	19.8	19.10	20.0	1.0	1.0	1.0
22	18.6	18.8	18.10	18.11	19.1	19.3	19.5	19.7	19.9	19.10	20.0	20.2	20.4	20.6	20.8	20.10	21.0	1.0	1.0	1.0
23	19.4	19.6	19.8	19.10	20.0	20.2	20.3	20.5	20.7	20.9	20.11	21.1	21.3	21.5	21.7	21.9	21.11	1.0	1.0	1.0
24	20.2	20.4	20.6	20.8	20.10	21.0	21.2	21.4	21.6	21.8	21.10	22.0	22.2	22.4	22.6	22.8	22.10	1.0	1.0	1.0
25	21.0	21.2	21.4	21.6	21.8	21.11	22.1	22.2	22.3	22.5	22.7	22.9	23.1	23.3	23.5	23.7	23.9	1.0	1.0	1.0

TABLE III.

	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
1	I. 0	I. 0	I. 0	I. 0	I. 0	I. 0	I. 0	I. 0	I. 0	I. 1	I. 1	I. 1	I. 1	I. 1	I. 1	I. 1	I. 1	I. 1	I. 1	I. 1
2	2. 0	2. 0	2. 0	2. 0	2. 0	2. 0	2. 1	2. 1	2. 1	2. 1	2. 1	2. 2	2. 2	2. 2	2. 2	2. 2	2. 2	2. 2	2. 3	2. 3
3	2. 11	3. 0	3. 0	3. 0	3. 0	3. 1	3. 1	3. 1	3. 1	3. 2	3. 2	3. 2	3. 2	3. 3	3. 3	3. 3	3. 3	3. 4	3. 4	3. 4
4	3. 11	3. 11	4. 0	4. 0	4. 0	4. 1	4. 1	4. 1	4. 2	4. 2	4. 2	4. 3	4. 3	4. 3	4. 4	4. 4	4. 4	4. 5	4. 5	4. 5
5	4. 11	4. 11	5. 0	5. 0	5. 0	5. 1	5. 1	5. 2	5. 2	5. 3	5. 3	5. 3	5. 4	5. 4	5. 5	5. 5	5. 5	5. 6	5. 6	5. 7
6	5. 11	5. 11	6. 0	6. 0	6. 1	6. 1	6. 2	6. 2	6. 3	6. 3	6. 4	6. 4	6. 5	6. 5	6. 6	6. 6	6. 7	6. 7	6. 8	6. 8
7	6. 10	6. 11	7. 0	7. 1	7. 1	7. 1	7. 2	7. 2	7. 3	7. 4	7. 4	7. 5	7. 5	7. 6	7. 6	7. 7	7. 8	7. 8	7. 9	7. 9
8	7. 10	7. 11	8. 0	8. 1	8. 1	8. 1	8. 2	8. 3	8. 3	8. 4	8. 5	8. 5	8. 6	8. 7	8. 7	8. 8	8. 9	8. 9	8. 10	8. 11
9	8. 10	8. 11	9. 0	9. 1	9. 1	9. 2	9. 2	9. 3	9. 4	9. 5	9. 5	9. 6	9. 7	9. 8	9. 8	9. 9	9. 10	9. 11	9. 11	10. 0
10	9. 10	9. 11	10. 0	10. 1	10. 1	10. 2	10. 3	10. 3	10. 4	10. 5	10. 6	10. 7	10. 8	10. 8	10. 9	10. 10	10. 11	11. 0	11. 1	11. 1
11	10. 9	10. 10	11. 0	11. 1	11. 1	11. 2	11. 3	11. 4	11. 5	11. 6	11. 7	11. 8	11. 8	11. 9	11. 10	11. 11	12. 0	12. 1	12. 2	12. 3
12	11. 9	11. 10	12. 1	12. 1	12. 1	12. 2	12. 3	12. 4	12. 5	12. 6	12. 7	12. 8	12. 9	12. 10	12. 11	13. 0	13. 1	13. 2	13. 3	13. 4
13	12. 9	12. 10	13. 1	13. 1	13. 1	13. 2	13. 3	13. 4	13. 5	13. 6	13. 7	13. 8	13. 9	13. 10	13. 11	14. 0	14. 1	14. 2	14. 3	14. 4
14	13. 9	13. 10	14. 1	14. 1	14. 1	14. 2	14. 3	14. 4	14. 5	14. 6	14. 7	14. 8	14. 9	14. 10	15. 0	15. 1	15. 2	15. 3	15. 4	15. 5
15	14. 8	14. 10	15. 1	15. 1	15. 1	15. 2	15. 3	15. 4	15. 5	15. 6	15. 7	15. 8	15. 9	15. 10	16. 0	16. 1	16. 2	16. 3	16. 4	16. 5
16	15. 8	15. 9	16. 1	16. 1	16. 1	16. 2	16. 3	16. 4	16. 5	16. 6	16. 7	16. 8	16. 9	16. 10	17. 0	17. 1	17. 2	17. 3	17. 4	17. 5
17	16. 8	16. 9	17. 1	17. 1	17. 1	17. 2	17. 3	17. 4	17. 5	17. 6	17. 7	17. 8	17. 9	18. 0	18. 1	18. 2	18. 3	18. 4	18. 5	18. 6
18	17. 8	17. 9	18. 1	18. 1	18. 1	18. 2	18. 3	18. 4	18. 5	18. 6	18. 7	18. 8	18. 9	19. 0	19. 1	19. 2	19. 3	19. 4	19. 5	19. 6
19	18. 7	18. 8	19. 1	19. 1	19. 1	19. 2	19. 3	19. 4	19. 5	19. 6	19. 7	19. 8	19. 9	20. 0	20. 1	20. 2	20. 3	20. 4	20. 5	20. 6
20	19. 7	19. 8	20. 1	20. 1	20. 1	20. 2	20. 3	20. 4	20. 5	20. 6	20. 7	20. 8	20. 9	21. 0	21. 1	21. 2	21. 3	21. 4	21. 5	21. 6
21	20. 7	20. 8	21. 1	21. 1	21. 1	21. 2	21. 3	21. 4	21. 5	21. 6	21. 7	21. 8	21. 9	22. 0	22. 1	22. 2	22. 3	22. 4	22. 5	22. 6
22	21. 7	21. 8	22. 1	22. 1	22. 1	22. 2	22. 3	22. 4	22. 5	22. 6	22. 7	22. 8	22. 9	23. 0	23. 1	23. 2	23. 3	23. 4	23. 5	23. 6
23	22. 6	22. 7	23. 1	23. 1	23. 1	23. 2	23. 3	23. 4	23. 5	23. 6	23. 7	23. 8	23. 9	24. 0	24. 1	24. 2	24. 3	24. 4	24. 5	24. 6
24	23. 6	23. 7	24. 1	24. 1	24. 1	24. 2	24. 3	24. 4	24. 5	24. 6	24. 7	24. 8	24. 9	25. 0	25. 1	25. 2	25. 3	25. 4	25. 5	25. 6
25	24. 6	24. 7	25. 1	25. 1	25. 1	25. 2	25. 3	25. 4	25. 5	25. 6	25. 7	25. 8	25. 9	26. 0	26. 1	26. 2	26. 3	26. 4	26. 5	26. 6
26	25. 6	25. 7	26. 1	26. 1	26. 1	26. 2	26. 3	26. 4	26. 5	26. 6	26. 7	26. 8	26. 9	27. 0	27. 1	27. 2	27. 3	27. 4	27. 5	27. 6
27	26. 6	26. 7	27. 1	27. 1	27. 1	27. 2	27. 3	27. 4	27. 5	27. 6	27. 7	27. 8	27. 9	28. 0	28. 1	28. 2	28. 3	28. 4	28. 5	28. 6

TABLE III.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
26	0.2	0.4	0.7	0.9	0.11	1.1	1.3	1.5	1.8	1.10	2.0	2.2	2.4	2.6	2.9	2.11	3.1	3.3	3.5	3.7
27	0.2	0.5	0.7	0.9	0.11	1.2	1.4	1.6	1.8	1.11	2.1	2.3	2.5	2.8	2.10	3.0	3.2	3.5	3.7	3.9
28	0.2	0.5	0.7	0.9	1.0	1.2	1.4	1.7	1.9	1.11	2.2	2.4	2.6	2.9	2.11	3.1	3.4	3.6	3.8	3.11
29	0.2	0.5	0.7	0.10	1.0	1.3	1.5	1.7	1.10	2.0	2.3	2.5	2.7	2.10	3.0	3.3	3.5	3.8	3.10	4.0
30	0.3	0.5	0.8	0.10	1.1	1.3	1.6	1.8	1.11	2.1	2.4	2.6	2.9	2.11	3.2	3.4	3.7	3.9	4.0	4.2
31	0.3	0.5	0.8	0.10	1.1	1.4	1.6	1.9	1.11	2.2	2.4	2.7	2.10	3.0	3.3	3.5	3.8	3.11	4.1	4.4
32	0.3	0.5	0.8	0.11	1.1	1.4	1.6	1.9	1.11	2.2	2.5	2.8	2.11	3.1	3.4	3.7	3.9	4.0	4.3	4.5
33	0.3	0.6	0.8	0.11	1.2	1.5	1.7	1.10	2.1	2.4	2.6	2.9	3.0	3.3	3.5	3.8	3.11	4.2	4.4	4.7
34	0.3	0.6	0.9	0.11	1.2	1.5	1.8	1.11	2.2	2.4	2.7	2.10	3.1	3.4	3.7	3.9	4.0	4.3	4.6	4.9
35	0.3	0.6	0.9	1.0	1.3	1.6	1.8	1.11	2.2	2.5	2.8	2.11	3.2	3.5	3.8	3.11	4.2	4.5	4.7	5.0
36	0.3	0.6	0.9	1.0	1.3	1.6	1.9	2.0	2.3	2.6	2.9	3.0	3.3	3.6	3.9	4.0	4.3	4.6	4.9	5.0
37	0.3	0.6	0.9	1.0	1.3	1.7	1.10	2.1	2.4	2.7	2.10	3.1	3.4	3.7	3.10	4.1	4.4	4.8	4.11	5.2
38	0.3	0.6	0.10	1.1	1.4	1.7	1.10	2.1	2.5	2.8	2.11	3.2	3.5	3.8	4.0	4.3	4.6	4.9	5.0	5.3
39	0.3	0.7	0.10	1.1	1.4	1.8	1.11	2.2	2.5	2.9	3.0	3.3	3.6	3.10	4.1	4.4	4.7	4.11	5.2	5.5
40	0.3	0.7	0.10	1.1	1.5	1.8	1.11	2.2	2.5	2.9	3.0	3.3	3.6	3.10	4.2	4.5	4.9	5.0	5.3	5.7
41	0.3	0.7	0.10	1.2	1.5	1.9	2.0	2.3	2.7	2.10	3.2	3.5	3.8	4.0	4.3	4.7	4.10	5.2	5.5	5.8
42	0.4	0.7	0.11	1.2	1.6	1.10	2.1	2.4	2.8	2.11	3.3	3.6	3.10	4.1	4.5	4.8	5.0	5.3	5.7	5.10
43	0.4	0.7	0.11	1.2	1.6	1.10	2.1	2.5	2.9	3.0	3.3	3.7	3.11	4.2	4.6	4.9	5.1	5.5	5.8	6.0
44	0.4	0.7	0.11	1.3	1.6	1.10	2.2	2.5	2.9	3.1	3.5	3.8	4.0	4.3	4.7	4.11	5.2	5.6	5.10	6.1
45	0.4	0.8	0.11	1.3	1.7	1.11	2.2	2.6	2.10	3.2	3.6	4.0	4.1	4.5	4.8	5.0	5.4	5.8	5.11	6.3
46	0.4	0.8	1.0	1.3	1.7	1.11	2.3	2.7	2.11	3.2	3.6	3.10	4.2	4.6	4.10	5.1	5.5	5.9	6.1	6.5
47	0.4	0.8	1.0	1.4	1.8	2.0	2.3	2.7	2.11	3.3	3.7	3.11	4.3	4.7	5.0	5.3	5.7	5.11	6.2	6.6
48	0.4	0.8	1.0	1.4	1.8	2.0	2.4	2.8	3.0	3.4	3.8	4.0	4.4	4.8	5.0	5.4	5.8	6.0	6.4	6.8
49	0.4	0.8	1.0	1.4	1.8	2.1	2.5	2.9	3.1	3.5	3.9	4.1	4.5	4.9	5.1	5.5	5.9	6.2	6.6	6.10
50	0.4	0.8	1.1	1.5	1.9	2.1	2.5	2.9	3.2	3.6	3.10	4.2	4.6	4.10	5.3	5.7	5.11	6.3	6.7	6.11

TABLE III.

	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
26	3.10	4.0	4.2	4.4	4.6	4.8	4.11	5.1	5.3	5.5	5.7	5.9	6.0	6.2	6.4	6.6	6.8	6.10	7.1	7.3
27	3.11	4.2	4.4	4.6	4.8	4.11	5.1	5.3	5.5	5.8	5.10	6.0	6.2	6.5	6.7	6.9	6.11	7.2	7.4	7.6
28	4.1	4.3	4.6	4.8	4.10	5.1	5.3	5.5	5.8	5.10	6.0	6.3	6.5	6.7	6.10	7.0	7.2	7.5	7.7	7.9
29	4.3	4.5	4.8	4.10	5.0	5.3	5.5	5.8	5.10	6.1	6.3	6.5	6.8	6.10	7.1	7.3	7.5	7.8	7.10	8.1
30	4.5	4.7	4.10	5.0	5.3	5.5	5.8	5.10	6.1	6.3	6.6	6.8	6.11	7.1	7.4	7.6	7.9	7.11	8.2	8.4
31	4.6	4.9	4.11	5.2	5.5	5.7	5.10	6.0	6.3	6.6	6.8	6.11	7.1	7.4	7.6	7.9	8.0	8.2	8.5	8.7
32	4.8	4.11	5.1	5.4	5.7	5.9	6.0	6.3	6.5	6.8	6.11	7.1	7.4	7.7	7.9	8.0	8.3	8.5	8.8	8.11
33	4.10	5.1	5.3	5.6	5.9	6.0	6.2	6.5	6.8	6.11	7.1	7.4	7.7	7.10	8.0	8.3	8.6	8.9	9.0	9.2
34	5.0	5.2	5.5	5.8	5.11	6.2	6.5	6.7	6.10	7.1	7.4	7.7	7.10	8.0	8.3	8.6	8.9	9.0	9.3	9.5
35	5.1	5.4	5.7	5.10	6.1	6.4	6.7	6.10	7.1	7.4	7.6	7.9	8.0	8.3	8.6	8.9	9.0	9.3	9.6	9.9
36	5.3	5.6	5.9	6.0	6.3	6.6	6.9	7.0	7.3	7.6	7.9	8.0	8.3	8.6	8.9	9.0	9.3	9.6	9.9	10.0
37	5.5	5.8	5.11	6.2	6.5	6.8	6.11	7.2	7.5	7.9	8.0	8.3	8.6	8.9	9.0	9.3	9.6	9.9	10.0	10.3
38	5.7	5.10	6.1	6.4	6.7	6.10	7.1	7.4	7.7	7.10	8.2	8.5	8.8	9.0	9.3	9.6	9.10	10.0	10.4	10.7
39	5.8	6.0	6.3	6.6	6.9	7.1	7.4	7.7	7.10	8.2	8.5	8.8	8.11	9.3	9.6	9.10	10.0	10.4	10.7	10.10
40	5.10	6.1	6.5	6.8	6.11	7.3	7.6	7.9	8.1	8.4	8.7	8.11	9.2	9.5	9.9	10.0	10.3	10.7	10.10	11.1
41	6.0	6.3	6.7	6.10	7.1	7.5	7.8	8.0	8.3	8.7	8.10	9.1	9.5	9.8	10.0	10.3	10.6	10.10	11.1	11.5
42	6.2	6.5	6.9	7.0	7.4	7.7	7.11	8.2	8.6	8.9	9.1	9.4	9.8	9.11	10.3	10.6	10.10	11.1	11.5	11.8
43	6.3	6.7	6.10	7.2	7.6	7.9	8.1	8.4	8.8	9.0	9.3	9.7	9.10	10.2	10.5	10.9	11.1	11.4	11.8	11.11
44	6.5	6.9	7.0	7.4	7.8	7.11	8.3	8.7	8.10	9.2	9.6	9.9	10.1	10.5	10.8	11.0	11.4	11.7	11.11	12.3
45	6.7	6.11	7.2	7.6	7.10	8.2	8.5	8.9	9.1	9.5	9.8	10.0	10.4	10.8	11.0	11.3	11.7	11.11	12.2	12.6
46	6.9	7.0	7.4	7.8	8.0	8.4	8.8	8.11	9.3	9.7	9.11	10.3	10.7	10.10	11.2	11.6	11.10	12.2	12.6	12.9
47	6.10	7.2	7.6	7.10	8.2	8.6	8.10	9.2	9.6	9.10	10.5	10.9	11.1	11.4	11.8	12.1	12.5	12.9	13.1	13.4
48	7.0	7.4	7.8	8.0	8.4	8.8	9.0	9.4	9.8	10.0	10.4	10.8	11.0	11.4	11.8	12.0	12.4	12.8	13.0	13.4
49	7.2	7.6	7.10	8.2	8.6	8.10	9.2	9.6	9.10	10.3	10.7	10.11	11.3	11.7	12.1	12.3	12.7	13.1	13.5	13.7
50	7.4	7.8	8.0	8.4	8.8	9.0	9.5	9.9	10.1	10.5	10.9	11.1	11.5	11.9	12.2	12.6	13.0	13.4	13.8	14.1

TABLE III.

	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
26	7.5	7.7	7.9	7.11	8.2	8.4	8.6	8.8	8.10	9.0	9.2	9.5	9.7	9.9	9.11	10.1	10.4	10.6	10.8	10.10
27	7.8	7.11	8.1	8.3	8.5	8.8	8.10	9.0	9.2	9.5	9.7	9.9	9.11	10.1	10.4	10.6	10.8	10.11	11.1	11.3
28	8.0	8.2	8.4	8.7	8.9	8.11	9.2	9.4	9.6	9.9	9.11	10.1	10.4	10.6	10.8	10.11	11.1	11.3	11.6	11.8
29	8.3	8.6	8.8	8.10	9.1	9.3	9.6	9.8	9.10	10.1	10.3	10.6	10.8	10.11	11.1	11.3	11.6	11.8	11.11	12.1
30	8.7	8.9	9.0	9.2	9.5	9.7	9.10	10.0	10.3	10.5	10.8	10.10	11.1	11.3	11.6	11.8	11.11	12.1	12.4	12.6
31	8.10	9.1	9.3	9.6	9.8	9.11	10.1	10.4	10.7	10.9	11.0	11.2	11.5	11.8	11.10	12.1	12.3	12.6	12.8	12.11
32	9.1	9.4	9.7	9.9	10.0	10.3	10.5	10.8	10.11	11.1	11.4	11.7	11.9	12.2	12.3	12.5	12.8	12.11	13.1	13.4
33	9.5	9.8	9.10	10.1	10.4	10.7	10.9	11.0	11.3	11.6	11.8	12.1	12.2	12.5	12.7	12.10	13.1	13.4	13.7	13.9
34	9.8	9.11	10.2	10.5	10.8	10.10	11.1	11.4	11.7	11.10	12.1	12.3	12.6	12.9	13.0	13.3	13.6	13.8	13.11	14.2
35	10.0	10.3	10.5	10.8	10.11	11.2	11.5	11.8	11.11	12.2	12.5	12.8	12.11	13.1	13.4	13.7	13.10	14.1	14.4	14.7
36	10.3	10.6	10.9	11.0	11.3	11.6	11.9	12.0	12.3	12.6	12.9	13.0	13.3	13.6	13.9	14.0	14.3	14.6	14.9	15.0
37	10.6	10.10	11.1	11.4	11.7	11.10	12.1	12.4	12.7	12.10	13.1	13.4	13.7	13.11	14.2	14.5	14.8	14.11	15.2	15.5
38	10.10	11.1	11.4	11.7	11.11	12.2	12.5	12.8	12.11	13.2	13.5	13.8	14.0	14.3	14.6	14.9	15.1	15.4	15.7	15.10
39	11.1	11.5	11.8	11.11	12.2	12.6	12.9	13.0	13.3	13.7	13.10	14.1	14.4	14.8	14.11	15.2	15.5	15.9	16.0	16.3
40	11.5	11.8	11.11	12.3	12.6	12.9	13.1	13.4	13.7	13.11	14.2	14.5	14.9	15.0	15.3	15.7	15.10	16.1	16.5	16.8
41	11.8	12.0	12.3	12.6	12.10	13.1	13.5	13.8	13.11	14.3	14.6	14.10	15.1	15.5	15.8	15.11	16.3	16.6	16.10	17.1
42	12.0	12.3	12.7	12.10	13.2	13.5	13.9	14.0	14.4	14.7	14.11	15.2	15.6	15.9	16.1	16.4	16.8	16.11	17.3	17.6
43	12.3	12.7	12.10	13.2	13.5	13.9	14.0	14.4	14.8	15.0	15.3	15.7	15.11	16.2	16.6	16.10	17.1	17.4	17.7	17.11
44	12.6	12.10	13.2	13.5	13.9	14.1	14.4	14.8	15.0	15.3	15.7	15.11	16.2	16.6	16.10	17.1	17.4	17.7	17.11	18.4
45	12.10	13.2	13.5	13.9	14.1	14.5	14.8	15.0	15.4	15.8	16.1	16.5	16.11	17.2	17.6	17.11	18.3	18.6	18.10	19.2
46	13.1	13.5	13.9	14.1	14.5	14.8	15.0	15.4	15.8	16.1	16.5	16.11	17.2	17.6	17.11	18.3	18.6	18.10	19.2	19.7
47	13.5	13.9	14.0	14.4	14.8	15.0	15.4	15.8	16.0	16.4	16.8	17.0	17.4	17.8	18.0	18.4	18.8	19.0	19.4	19.7
48	13.8	14.0	14.4	14.8	15.0	15.4	15.8	16.0	16.4	16.8	17.0	17.4	17.8	18.0	18.4	18.8	19.0	19.4	19.8	20.0
49	13.11	14.4	14.8	15.0	15.4	15.8	16.0	16.4	16.8	17.0	17.4	17.8	18.0	18.4	18.8	19.0	19.4	19.8	20.0	20.5
50	14.3	14.7	14.11	15.3	15.8	16.0	16.4	16.8	17.0	17.4	17.8	18.0	18.4	18.8	19.0	19.4	19.8	20.0	20.5	21.0

TABLE III.

	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
26	11. 0 11. 2	11. 5	11. 7	11. 9	11. 11	12. 1	12. 3	12. 5	12. 6	12. 8	12. 10	13. 0	13. 2	13. 4	13. 7	13. 9	13. 11	14. 1	14. 3	14. 5
27	11. 5 11. 8	11. 10	12. 0	12. 2	12. 5	12. 7	12. 9	12. 11	12. 13	13. 0	13. 2	13. 4	13. 6	13. 8	13. 11	14. 1	14. 3	14. 5	14. 8	14. 10
28	11. 10 12. 1	12. 3	12. 5	12. 8	12. 10	13. 0	13. 2	13. 4	13. 5	13. 7	13. 10	14. 0	14. 2	14. 5	14. 7	14. 9	15. 0	15. 2	15. 4	15. 7
29	12. 3 12. 6	12. 8	12. 11	13. 1	13. 4	13. 6	13. 8	13. 11	14. 1	14. 4	14. 6	14. 8	14. 11	15. 1	15. 4	15. 6	15. 9	15. 11	16. 1	
30	12. 9 12. 11	13. 2	13. 4	13. 7	13. 9	14. 0	14. 2	14. 5	14. 7	14. 10	15. 0	15. 3	15. 5	15. 8	15. 10	16. 1	16. 3	16. 6	16. 8	
31	13. 2 13. 4	13. 7	13. 9	14. 0	14. 3	14. 5	14. 8	14. 11	15. 1	15. 3	15. 5	15. 8	15. 10	16. 1	16. 4	16. 7	16. 10	17. 0	17. 3	
32	13. 7 13. 9	14. 0	14. 3	14. 5	14. 8	14. 11	15. 1	15. 4	15. 7	15. 10	16. 1	16. 3	16. 6	16. 9	17. 0	17. 3	17. 5	17. 8	17. 11	18. 1
33	14. 0 14. 3	14. 5	14. 8	14. 11	15. 1	15. 4	15. 7	15. 10	16. 1	16. 4	16. 6	16. 9	17. 0	17. 3	17. 6	17. 9	18. 1	18. 4	18. 7	18. 11
34	14. 5 14. 8	14. 11	15. 1	15. 4	15. 7	15. 10	16. 1	16. 4	16. 6	16. 9	17. 0	17. 3	17. 6	17. 9	18. 1	18. 4	18. 7	18. 10	19. 0	19. 5
35	14. 10 15. 1	15. 4	15. 7	15. 10	16. 1	16. 4	16. 6	16. 9	17. 0	17. 3	17. 6	17. 9	18. 1	18. 4	18. 7	18. 10	19. 0	19. 3	19. 6	19. 9
36	15. 3 15. 6	15. 9	16. 0	16. 3	16. 6	16. 9	17. 0	17. 3	17. 6	17. 9	18. 0	18. 3	18. 6	18. 9	19. 0	19. 3	19. 6	19. 9	20. 0	20. 3
37	15. 8 15. 11	16. 2	16. 5	16. 8	17. 0	17. 3	17. 6	17. 9	18. 0	18. 3	18. 6	18. 9	19. 0	19. 3	19. 6	19. 9	20. 1	20. 4	20. 7	
38	16. 1 16. 4	16. 8	16. 11	17. 2	17. 5	17. 8	17. 11	18. 2	18. 5	18. 8	19. 0	19. 3	19. 6	19. 9	20. 1	20. 4	20. 7	20. 10	21. 1	
39	16. 6 16. 10	17. 1	17. 4	17. 7	17. 11	18. 2	18. 5	18. 8	19. 0	19. 3	19. 6	19. 9	20. 1	20. 4	20. 7	20. 10	21. 1	21. 4	21. 7	21. 8
40	16. 11 17. 3	17. 6	17. 9	18. 1	18. 4	18. 7	18. 11	19. 2	19. 5	19. 8	19. 11	20. 3	20. 6	20. 9	21. 1	21. 4	21. 7	21. 10	22. 1	22. 3
41	17. 4 17. 8	17. 11	18. 3	18. 6	18. 10	19. 1	19. 4	19. 8	19. 11	20. 3	20. 6	20. 9	21. 1	21. 4	21. 7	21. 10	22. 1	22. 4	22. 7	22. 9
42	17. 10 18. 1	18. 5	18. 8	19. 0	19. 3	19. 7	19. 10	20. 2	20. 5	20. 9	21. 0	21. 3	21. 6	21. 10	22. 1	22. 4	22. 7	22. 10	23. 1	23. 4
43	18. 3 18. 6	18. 10	19. 1	19. 5	19. 9	20. 0	20. 4	20. 7	20. 11	21. 2	21. 6	21. 10	22. 1	22. 5	22. 8	23. 0	23. 4	23. 7	23. 11	
44	18. 8 18. 11	19. 3	19. 7	19. 10	20. 2	20. 6	20. 9	21. 1	21. 5	21. 8	22. 0	22. 4	22. 7	22. 11	23. 3	23. 6	23. 10	24. 2	24. 5	
45	19. 1 19. 5	19. 8	20. 0	20. 4	20. 8	20. 11	21. 3	21. 7	21. 11	22. 2	22. 6	22. 10	23. 1	23. 5	23. 9	24. 1	24. 5	24. 8	25. 0	
46	19. 6 19. 10	20. 2	20. 5	20. 9	21. 1	21. 5	21. 9	22. 1	22. 4	22. 8	23. 0	23. 4	23. 7	24. 0	24. 3	24. 6	24. 10	25. 2	25. 5	25. 7
47	20. 0 20. 3	20. 7	20. 11	21. 3	21. 7	21. 10	22. 2	22. 6	22. 10	23. 2	23. 6	23. 10	24. 2	24. 6	25. 0	25. 4	25. 8	26. 1	26. 4	26. 8
48	20. 4 20. 8	21. 0	21. 4	21. 8	22. 0	22. 4	22. 8	23. 0	23. 4	23. 8	24. 0	24. 4	24. 8	25. 0	25. 4	25. 8	26. 1	26. 5	26. 9	27. 1
49	20. 9 21. 1	21. 5	21. 9	22. 1	22. 5	22. 9	23. 1	23. 5	23. 9	24. 2	24. 6	24. 10	25. 2	25. 6	25. 10	26. 2	26. 6	27. 0	27. 4	27. 8
50	21. 2 21. 6	21. 11	22. 3	22. 7	22. 11	23. 3	23. 7	24. 0	24. 4	24. 8	25. 0	25. 4	25. 8	26. 1	26. 5	26. 9	27. 1	27. 5	27. 9	

TABLE III.

	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
26	14.8	14.10	15.0	15.2	15.4	15.6	15.9	15.11	16.1	16.3	16.5	16.7	16.10	17.0	17.2	17.4	17.6	17.8	17.11	18.1
27	15.2	15.5	15.7	15.9	15.11	16.2	16.4	16.6	16.10	17.1	17.3	17.5	17.8	17.10	18.0	18.2	18.5	18.7	18.9	
28	15.9	15.11	16.2	16.4	16.6	16.9	17.1	17.4	17.6	17.8	18.1	18.3	18.6	18.8	18.10	19.1	19.3	19.5		
29	16.4	16.6	16.9	16.11	17.1	17.4	17.6	17.9	17.11	18.2	18.4	18.6	18.9	18.11	19.2	19.4	19.6	19.9	19.11	20.2
30	16.11	17.1	17.4	17.6	17.9	17.11	18.2	18.4	18.7	18.9	19.0	19.2	19.5	19.7	19.10	20.0	20.3	20.5	20.8	20.10
31	17.5	17.8	17.10	18.1	18.4	18.6	18.9	18.11	19.2	19.5	19.7	19.10	20.0	20.3	20.5	20.8	20.11	21.1	21.4	21.6
32	18.0	18.3	18.5	18.8	18.11	19.1	19.4	19.7	19.9	20.0	20.3	20.5	20.8	20.11	21.1	21.4	21.7	21.9	22.0	22.3
33	18.7	18.10	19.0	19.3	19.6	19.9	19.11	20.2	20.5	20.8	20.10	21.1	21.4	21.7	21.9	22.2	22.5	22.8	23.1	23.4
34	19.2	19.4	19.7	19.10	20.1	20.4	20.7	20.9	21.0	21.3	21.6	22.1	22.4	22.7	22.10	23.1	23.4	23.7	24.1	24.4
35	19.8	19.11	20.2	20.5	20.8	20.11	21.2	21.5	21.8	21.11	22.1	22.4	22.7	22.10	23.1	23.4	23.7	24.1	24.4	24.7
36	20.3	20.6	20.9	21.0	21.3	21.6	21.9	22.0	22.3	22.6	22.9	23.0	23.3	23.6	23.9	24.0	24.3	24.6	24.9	25.0
37	20.10	21.1	21.4	21.7	21.10	22.1	22.4	22.7	22.10	23.2	23.5	23.8	23.11	24.2	24.5	24.8	24.11	25.2	25.5	25.8
38	21.5	21.8	21.11	22.2	22.5	22.8	23.0	23.3	23.6	23.9	24.0	24.3	24.6	24.10	25.1	25.4	25.7	25.10	26.2	26.5
39	21.11	22.3	22.6	22.9	23.0	23.3	23.6	23.10	24.1	24.4	24.8	24.11	25.2	25.5	25.9	26.0	26.3	26.7	26.10	27.1
40	22.6	22.9	23.1	23.4	23.7	23.11	24.2	24.5	24.9	25.0	25.3	25.7	25.10	26.1	26.5	26.8	26.11	27.3	27.6	27.9
41	23.1	23.4	23.8	23.11	24.2	24.5	24.9	25.1	25.4	25.8	25.11	26.2	26.6	26.9	27.1	27.4	27.7	27.11	28.2	28.6
42	23.8	23.11	24.3	24.6	24.10	25.1	25.5	25.8	26.0	26.3	26.7	26.10	27.2	27.5	27.9	28.0	28.4	28.7	29.1	29.4
43	24.2	24.6	24.9	25.1	25.5	25.8	26.0	26.3	26.7	27.0	27.11	27.2	27.6	27.9	28.1	28.4	28.8	29.0	29.3	29.7
44	24.9	25.1	25.4	25.8	26.0	26.3	26.7	26.11	27.2	27.6	27.10	28.1	28.5	28.9	29.1	29.5	29.8	30.1	30.4	30.7
45	25.4	25.8	25.11	26.3	26.7	26.11	27.2	27.6	27.10	28.2	28.5	28.9	29.1	29.5	29.8	30.1	30.4	30.8	31.1	31.3
46	25.11	26.2	26.6	26.10	27.2	27.6	27.10	28.1	28.5	28.9	29.1	29.5	29.8	30.1	30.4	30.8	31.0	31.4	31.8	31.11
47	26.5	26.9	27.1	27.5	27.9	28.1	28.5	28.9	29.1	29.5	29.8	30.0	30.4	30.8	31.0	31.4	31.8	32.0	32.4	32.8
48	27.0	27.4	27.8	28.0	28.4	28.8	29.0	29.4	29.8	30.0	30.4	30.8	31.0	31.4	31.8	32.0	32.4	32.8	33.0	33.4
49	27.7	27.11	28.3	28.7	28.11	29.3	29.7	29.11	30.3	30.7	31.0	31.4	31.8	32.0	32.4	32.8	33.0	33.4	33.8	34.0
50	28.2	28.6	28.10	29.2	29.6	29.10	30.3	30.7	30.11	31.3	31.7	32.1	32.4	32.8	33.0	33.4	33.8	34.2	34.6	35.0

TABLE III.

	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
26	18.3	18.5	18.7	18.9	19.0	19.2	19.4	19.6	19.8	19.10	20.1	20.3	20.5	20.7	20.9	20.11	21.1	21.4	21.8	
27	18.1	19.2	19.4	19.6	19.8	19.10	20.1	20.3	20.5	20.8	20.10	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8
28	19.8	19.10	20.0	20.3	20.5	20.7	20.10	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	21.10	21.11	21.12
29	20.4	20.7	20.9	20.11	21.2	21.4	21.7	21.9	21.11	22.2	22.4	22.7	22.9	23.0	23.1	23.2	23.3	23.4	23.5	23.6
30	21.1	21.3	21.6	21.8	21.11	22.1	22.4	22.6	22.9	22.11	23.1	23.4	23.7	23.9	24.0	24.1	24.2	24.3	24.4	24.5
31	21.9	22.0	22.2	22.5	22.7	22.10	23.0	23.3	23.6	23.8	23.11	24.1	24.4	24.7	24.9	25.0	25.1	25.2	25.3	25.4
32	22.5	22.8	22.11	23.1	23.4	23.7	23.9	24.0	24.3	24.5	24.8	24.11	25.1	25.4	25.7	25.9	26.0	26.1	26.2	26.3
33	23.2	23.5	23.7	23.10	24.1	24.4	24.6	24.9	25.0	25.3	25.5	25.8	25.11	26.1	26.4	26.7	26.10	27.1	27.3	27.6
34	23.10	24.1	24.4	24.7	24.10	25.0	25.3	25.6	25.9	26.0	26.3	26.5	26.8	26.11	27.1	27.4	27.7	27.10	28.1	28.4
35	24.7	24.10	25.0	25.3	25.6	25.9	26.0	26.3	26.6	26.9	27.0	27.3	27.5	27.8	28.1	28.4	28.7	28.10	29.1	29.4
36	25.3	25.6	25.9	26.0	26.3	26.6	26.9	27.0	27.3	27.6	27.9	28.0	28.3	28.6	28.9	29.0	29.3	29.6	29.9	30.0
37	25.11	26.3	26.6	26.9	27.0	27.3	27.6	27.9	28.0	28.3	28.6	28.9	29.0	29.3	29.6	29.9	30.0	30.1	30.2	30.3
38	26.8	26.11	27.2	27.5	27.9	28.0	28.3	28.6	28.9	29.0	29.3	29.6	29.9	30.0	30.1	30.2	30.3	30.4	30.5	30.6
39	27.4	27.8	27.11	28.2	28.5	28.9	29.0	29.3	29.6	29.10	30.1	30.4	30.7	30.10	31.1	31.4	31.7	31.10	32.1	32.4
40	28.1	28.4	28.7	28.11	29.2	29.5	29.9	30.0	30.3	30.7	30.10	31.1	31.4	31.7	31.10	32.1	32.4	32.7	33.1	33.4
41	28.9	29.1	29.4	29.7	29.11	30.2	30.6	30.9	31.0	31.4	31.7	31.10	32.1	32.4	32.7	33.1	33.4	33.7	34.1	34.4
42	29.6	29.9	30.1	30.4	30.8	30.11	31.2	31.6	31.10	32.1	32.4	32.7	33.1	33.4	33.7	34.1	34.4	34.7	35.1	35.4
43	30.2	30.6	30.9	31.1	31.4	31.8	31.11	32.2	32.6	32.10	33.1	33.4	33.7	34.1	34.4	34.7	35.1	35.4	35.7	36.1
44	30.10	31.2	31.6	31.9	32.2	32.6	32.10	33.1	33.4	33.7	34.1	34.4	34.7	35.1	35.4	35.7	36.1	36.4	36.7	37.1
45	31.7	31.11	32.2	32.6	32.10	33.1	33.4	33.7	34.1	34.4	34.7	35.1	35.4	35.7	36.1	36.4	36.7	37.1	37.4	37.7
46	32.3	32.7	32.11	33.2	33.6	33.10	34.1	34.4	34.7	35.1	35.4	35.7	36.1	36.4	36.7	37.1	37.4	37.7	38.1	38.4
47	33.0	33.4	33.7	33.11	34.2	34.6	34.10	35.1	35.4	35.7	36.1	36.4	36.7	37.1	37.4	37.7	38.1	38.4	38.7	39.1
48	33.8	34.0	34.4	34.8	35.0	35.4	35.8	36.0	36.4	36.8	37.0	37.4	37.8	38.0	38.4	38.8	39.0	39.4	39.8	40.0
49	34.4	34.9	35.1	35.5	35.9	36.1	36.5	36.9	37.1	37.5	37.9	38.1	38.5	38.9	39.3	39.7	40.1	40.5	40.9	41.3
50	35.1	35.5	35.9	36.1	36.5	36.9	37.1	37.5	37.9	38.1	38.5	38.9	39.3	39.7	40.1	40.5	40.9	41.3	41.7	42.1

TABLE III.

	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
26	21.10	22.0	322.	522.	722.	922.	1123.	13.	23.	423.	633.	823.	1024.	124.	224.	524.	724.	924.	1125.	135.
27	22.8	22.11	23.1	23.3	23.5	23.8	23.10	24.0	24.2	24.5	24.7	24.9	24.11	25.2	25.4	25.6	25.8	25.11	26.1	26.3
28	23.6	23.9	23.11	24.1	24.4	24.6	24.8	24.11	25.1	25.3	25.5	25.7	25.10	26.1	26.3	26.5	26.8	26.10	27.0	27.3
29	24.4	24.7	24.9	25.0	25.2	25.5	25.7	25.9	26.0	26.2	26.5	26.7	26.9	27.0	27.2	27.5	27.7	27.9	28.0	28.2
30	25.3	25.5	25.8	25.10	26.1	26.3	26.6	26.8	26.11	27.1	27.4	27.6	27.9	28.1	28.3	28.5	28.8	28.11	29.1	29.2
31	26.1	26.3	26.6	26.8	27.0	27.2	27.4	27.7	27.9	28.0	28.2	28.5	28.8	28.10	29.1	29.3	29.6	29.9	30.1	30.2
32	26.11	27.1	27.4	27.7	27.9	28.0	28.2	28.5	28.8	28.10	29.1	29.3	29.6	29.9	30.1	30.3	30.6	30.9	31.1	31.1
33	27.9	28.0	28.2	28.5	28.8	28.10	29.1	29.3	29.6	29.9	30.1	30.3	30.6	30.9	31.1	31.3	31.6	31.9	32.1	32.1
34	28.7	28.10	29.1	29.3	29.6	29.9	30.1	30.3	30.6	30.9	31.1	31.3	31.6	31.9	32.1	32.3	32.6	32.9	33.1	33.1
35	29.5	29.8	29.11	30.2	30.5	30.8	30.10	31.1	31.4	31.7	31.10	32.1	32.4	32.7	32.10	33.1	33.4	33.7	34.0	34.0
36	30.3	30.6	30.9	31.0	31.3	31.6	31.9	32.0	32.3	32.6	32.9	33.0	33.3	33.6	33.9	34.0	34.3	34.6	34.9	35.0
37	31.1	31.4	31.7	31.10	32.1	32.4	32.7	32.10	33.1	33.4	33.7	34.0	34.3	34.6	34.9	35.0	35.3	35.6	35.9	36.0
38	31.11	32.2	32.6	32.9	33.0	33.3	33.6	33.9	34.1	34.4	34.7	34.10	35.1	35.4	35.7	36.0	36.3	36.6	36.9	37.0
39	32.9	33.1	33.4	33.7	33.10	34.2	34.5	34.8	34.11	35.3	35.6	35.9	36.0	36.3	36.6	36.9	37.2	37.5	37.8	38.1
40	33.7	33.11	34.2	34.5	34.9	35.0	35.3	35.6	35.9	36.1	36.4	36.7	37.0	37.3	37.6	37.9	38.2	38.5	38.8	39.1
41	34.5	34.9	35.0	35.3	35.6	35.9	36.2	36.5	36.8	37.1	37.4	37.7	38.0	38.3	38.6	38.9	39.2	39.5	39.8	40.1
42	35.4	35.7	35.11	36.2	36.6	36.9	37.1	37.4	37.7	38.0	38.3	38.6	38.9	39.2	39.5	39.8	40.1	40.4	40.7	41.0
43	36.2	36.5	36.9	37.0	37.4	37.8	37.11	38.2	38.6	38.10	39.1	39.5	39.9	40.0	40.4	40.7	41.0	41.3	41.6	41.9
44	37.0	37.3	37.7	37.11	38.2	38.6	38.10	39.1	39.5	39.9	40.0	40.4	40.7	41.0	41.3	41.6	41.9	42.2	42.5	42.8
45	37.10	38.2	38.5	38.9	39.1	39.5	39.9	40.0	40.4	40.7	41.0	41.3	41.6	41.9	42.2	42.5	42.8	43.1	43.4	43.7
46	38.8	39.0	39.4	39.7	39.11	40.3	40.7	40.11	41.3	41.7	41.10	42.2	42.6	42.10	43.2	43.5	43.9	44.1	44.5	44.9
47	39.6	39.10	40.2	40.6	40.10	41.2	41.6	41.10	42.2	42.6	42.10	43.2	43.6	43.10	44.2	44.6	44.10	45.2	45.6	45.9
48	40.4	40.8	41.0	41.4	41.8	42.0	42.4	42.8	43.0	43.4	43.8	44.0	44.4	44.8	45.0	45.4	45.8	46.0	46.4	46.8
49	41.2	41.6	41.10	42.2	42.6	42.10	43.2	43.6	43.10	44.2	44.6	44.10	45.2	45.6	45.10	46.2	46.6	47.0	47.4	47.8
50	42.0	42.4	42.8	43.2	43.6	44.0	44.4	44.8	45.2	45.6	46.0	46.4	46.8	47.2	47.6	48.0	48.4	48.8	49.2	49.6

TABLE III.

	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
26	25.6	25.8	25.10	26.0	26.2	26.4	26.7	26.9	26.11	27.1	27.3	27.5	27.8	27.10	28.0	28.2	28.4	28.6	28.9	28.11
27	26.5	26.8	26.10	27.0	27.2	27.4	27.7	27.9	27.11	28.1	28.3	28.5	28.8	28.11	29.0	29.2	29.5	29.8	29.10	30.0
28	27.5	27.7	27.10	28.0	28.2	28.5	28.7	28.9	29.0	29.2	29.4	29.7	29.9	29.11	30.0	30.2	30.4	30.6	30.11	31.1
29	28.5	28.7	28.10	29.0	29.2	29.5	29.7	29.10	30.0	30.2	30.5	30.7	30.10	31.0	31.1	31.3	31.5	31.7	31.10	32.0
30	29.5	29.7	29.10	30.0	30.2	30.5	30.8	30.10	31.0	31.1	31.3	31.6	31.11	32.1	32.2	32.4	32.6	32.9	32.11	33.0
31	30.4	30.7	30.9	31.0	31.1	31.3	31.6	31.10	32.0	32.1	32.3	32.6	32.11	33.1	33.2	33.4	33.7	33.10	34.0	34.1
32	31.4	31.7	31.9	32.0	32.1	32.3	32.6	32.11	33.0	33.1	33.3	33.6	33.11	34.1	34.2	34.4	34.7	34.10	35.0	35.1
33	32.4	32.7	32.9	33.0	33.1	33.3	33.6	33.11	34.0	34.1	34.3	34.6	34.11	35.1	35.2	35.4	35.7	35.10	36.0	36.1
34	33.4	33.7	33.9	34.0	34.1	34.3	34.6	34.11	35.0	35.1	35.3	35.6	35.11	36.1	36.2	36.4	36.7	36.10	37.0	37.1
35	34.4	34.7	34.9	35.0	35.1	35.3	35.6	35.11	36.0	36.1	36.3	36.6	36.11	37.1	37.2	37.4	37.7	37.10	38.0	38.1
36	35.4	35.7	35.9	36.0	36.1	36.3	36.6	36.11	37.0	37.1	37.3	37.6	37.11	38.1	38.2	38.4	38.7	38.10	39.0	39.1
37	36.4	36.7	36.9	37.0	37.1	37.3	37.6	37.11	38.0	38.1	38.3	38.6	38.11	39.1	39.2	39.4	39.7	39.10	40.0	40.1
38	37.4	37.7	37.9	38.0	38.1	38.3	38.6	38.11	39.0	39.1	39.3	39.6	39.11	40.1	40.2	40.4	40.7	40.10	41.0	41.1
39	38.4	38.7	38.9	39.0	39.1	39.3	39.6	39.11	40.0	40.1	40.3	40.6	40.11	41.1	41.2	41.4	41.7	41.10	42.0	42.1
40	39.4	39.7	39.9	40.0	40.1	40.3	40.6	40.11	41.0	41.1	41.3	41.6	41.11	42.1	42.2	42.4	42.7	42.10	43.0	43.1
41	40.4	40.7	40.9	41.0	41.1	41.3	41.6	41.11	42.0	42.1	42.3	42.6	42.11	43.1	43.2	43.4	43.7	43.10	44.0	44.1
42	41.4	41.7	41.9	42.0	42.1	42.3	42.6	42.11	43.0	43.1	43.3	43.6	43.11	44.1	44.2	44.4	44.7	44.10	45.0	45.1
43	42.4	42.7	42.9	43.0	43.1	43.3	43.6	43.11	44.0	44.1	44.3	44.6	44.11	45.1	45.2	45.4	45.7	45.10	46.0	46.1
44	43.4	43.7	43.9	44.0	44.1	44.3	44.6	44.11	45.0	45.1	45.3	45.6	45.11	46.1	46.2	46.4	46.7	46.10	47.0	47.1
45	44.4	44.7	44.9	45.0	45.1	45.3	45.6	45.11	46.0	46.1	46.3	46.6	46.11	47.1	47.2	47.4	47.7	47.10	48.0	48.1
46	45.4	45.7	45.9	46.0	46.1	46.3	46.6	46.11	47.0	47.1	47.3	47.6	47.11	48.1	48.2	48.4	48.7	48.10	49.0	49.1
47	46.4	46.7	46.9	47.0	47.1	47.3	47.6	47.11	48.0	48.1	48.3	48.6	48.11	49.1	49.2	49.4	49.7	49.10	50.0	50.1
48	47.4	47.7	47.9	48.0	48.1	48.3	48.6	48.11	49.0	49.1	49.3	49.6	49.11	50.1	50.2	50.4	50.7	50.10	51.0	51.1
49	48.4	48.7	48.9	49.0	49.1	49.3	49.6	49.11	50.0	50.1	50.3	50.6	50.11	51.1	51.2	51.4	51.7	51.10	52.0	52.1
50	49.4	49.7	49.9	50.0	50.1	50.3	50.6	50.11	51.0	51.1	51.3	51.6	51.11	52.1	52.2	52.4	52.7	52.10	53.0	53.1
51	50.4	50.7	50.9	51.0	51.1	51.3	51.6	51.11	52.0	52.1	52.3	52.6	52.11	53.1	53.2	53.4	53.7	53.10	54.0	54.1
52	51.4	51.7	51.9	52.0	52.1	52.3	52.6	52.11	53.0	53.1	53.3	53.6	53.11	54.1	54.2	54.4	54.7	54.10	55.0	55.1

TABLE IV.

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
1	0.8	1.5	2.1	2.9	3.6	4.2	4.10	5.7	6.3	6.11	7.8	8.4	9.0	9.9	10.5	11.1	11.10	12.6	13.2	13.11
2	1.5	2.9	4.2	5.7	6.11	8.4	9.9	11.1	12.6	13.11	15.3	16.8	18.1	19.5	20.10	22.3	23.7	25.0	26.5	27.9
3	2.1	4.2	6.3	8.4	10.5	12.6	14.7	16.8	18.9	20.10	22.11	25.0	27.1	29.2	31.3	33.4	35.5	37.6	39.7	41.8
4	2.9	5.7	8.4	11.1	13.11	16.8	19.5	22.3	25.0	27.9	30.7	33.4	36.1	38.11	41.8	44.5	47.3	50.0	52.9	55.7
5	3.6	6.11	10.5	13.11	17.4	20.10	24.4	27.9	31.3	34.9	38.2	41.8	45.2	48.7	52.1	55.7	59.0	62.6	66.0	69.5
6	4.2	8.4	12.6	16.8	20.10	25.0	29.2	33.4	37.6	41.8	45.10	50.0	54.2	58.4	62.6	66.8	70.10	75.0	79.2	83.4
7	4.10	9.9	14.7	19.5	24.4	29.2	34.0	38.11	43.9	48.7	53.6	58.4	63.2	68.1	72.11	77.9	82.8	87.6	92.4	97.3
8	5.7	11.1	16.8	22.3	27.9	33.4	38.11	44.5	50.0	55.7	61.1	66.8	72.3	77.9	83.4	88.11	94.5	100.0	105.7	111.1
9	6.3	12.6	18.9	25.0	31.3	37.6	43.9	50.0	56.3	62.6	68.9	75.0	81.3	87.6	93.9	100.0	106.3	112.6	118.9	125.0
10	6.11	13.11	20.10	27.9	34.9	41.5	48.7	55.7	62.6	69.5	76.5	83.4	90.3	97.3	104.2	111.1	118.1	125.0	131.11	138.11
11	7.8	15.3	22.11	30.7	38.2	45.10	53.6	61.1	68.9	76.5	84.0	91.8	99.4	106.11	114.7	122.3	129.10	137.6	145.2	152.9
12	8.4	16.8	25.0	33.4	41.8	50.0	58.4	66.8	75.0	83.4	91.8	100.0	108.4	116.8	125.0	133.4	141.8	150.0	158.4	166.8
13	9.0	18.1	27.1	36.1	45.1	55.0	63.2	72.3	81.3	90.3	99.4	108.4	117.4	126.5	135.5	144.5	153.6	162.6	171.6	180.7
14	9.9	19.5	29.2	38.11	48.7	58.4	68.1	77.9	87.6	97.3	106.11	116.8	126.5	136.1	145.10	155.7	165.3	175.0	184.9	194.5
15	10.5	20.10	31.3	41.5	52.1	62.6	72.3	82.8	92.4	102.4	112.6	123.0	133.5	143.10	153.6	164.1	174.7	185.3	195.9	206.4
16	11.1	22.3	33.4	44.5	55.7	66.8	77.9	88.11	98.4	108.4	118.9	129.1	139.5	150.0	160.5	171.0	181.5	192.0	202.5	213.0
17	11.10	23.7	35.5	47.3	59.0	70.10	82.8	94.5	106.3	118.1	129.1	140.5	151.9	163.2	174.5	185.8	197.1	208.4	219.7	231.0
18	12.6	25.0	37.6	50.0	62.6	75.0	87.6	100.0	112.6	125.0	137.6	150.0	162.6	175.0	187.6	200.0	212.6	225.0	237.6	250.0
19	13.1	26.5	39.7	52.9	66.0	79.2	92.4	105.7	118.9	131.1	144.5	158.4	171.6	184.9	197.1	211.1	224.4	237.6	250.0	263.11
20	13.11	27.9	41.8	55.7	70.1	84.0	97.3	111.1	125.0	138.11	152.9	166.8	180.7	194.5	208.4	222.3	236.1	250.0	263.11	277.9
21	14.7	29.2	44.5	58.4	72.3	86.1	100.0	114.7	129.1	143.9	158.4	173.0	187.6	202.5	217.4	232.3	247.1	262.0	276.9	291.8
22	15.3	30.7	47.3	61.1	76.5	91.8	106.11	121.0	136.1	151.0	166.0	181.0	196.0	211.0	226.0	241.0	256.0	271.0	286.0	301.0
23	16.0	31.1	48.7	63.2	79.2	95.1	110.8	125.3	140.5	155.7	170.8	185.9	201.0	216.1	231.2	246.3	261.4	276.5	291.6	306.7
24	16.8	33.4	50.0	66.8	83.4	100.0	116.8	133.4	150.0	166.8	183.4	200.0	216.8	233.4	250.0	266.6	283.2	299.8	316.4	333.0
25	17.4	34.9	52.1	69.5	88.1	104.2	121.0	138.11	156.3	173.0	189.5	206.0	222.5	239.0	255.5	272.0	288.5	305.0	321.5	338.0

TABLE IV

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000																				
26	18.	1	36.	1	54.	2	72.	3	90.	3	108.	4	126.	5	144.	5	162.	6	180.	7	198.	7	216.	8	234.	9	252.	9	270.	10	288.	11	306.	11	325.	0	343.	1	361.	1
27	18.	9	37.	6	56.	3	75.	0	93.	9	112.	6	131.	3	150.	0	168.	9	187.	6	206.	3	225.	0	243.	9	262.	6	281.	3	300.	0	318.	9	337.	6	356.	3	375.	0
28	19.	5	38.	11	58.	4	77.	9	97.	3	116.	8	136.	1	155.	7	175.	0	194.	5	213.	11	233.	4	252.	9	272.	3	291.	8	311.	1	330.	7	350.	0	369.	5	388.	11
29	20.	2	40.	3	60.	5	80.	7	100.	8	120.	10	141.	0	161.	1	181.	3	201.	5	221.	6	241.	8	261.	10	281.	11	302.	1	322.	3	342.	4	362.	6	382.	8	402.	9
30	20.	10	41.	8	62.	6	83.	4	104.	2	125.	0	145.	10	166.	8	187.	6	208.	4	229.	2	250.	0	270.	10	291.	8	312.	6	333.	4	354.	2	375.	0	395.	10	416.	8
31	21.	6	43.	1	64.	7	86.	1	107.	8	129.	2	150.	8	172.	3	193.	9	215.	3	236.	10	258.	4	279.	10	301.	5	322.	11	344.	5	366.	0	387.	6	409.	0	430.	7
32	22.	3	44.	5	66.	8	88.	11	111.	1	133.	4	155.	7	177.	9	200.	0	222.	3	244.	5	266.	8	288.	11	311.	1	333.	4	355.	7	377.	9	400.	0	422.	3	444.	5
33	22.	11	45.	10	68.	9	91.	8	114.	7	137.	6	160.	5	183.	4	206.	3	229.	2	252.	1	275.	0	297.	11	320.	10	343.	9	366.	8	389.	7	412.	6	435.	5	458.	4
34	23.	7	47.	3	70.	10	94.	5	118.	1	141.	8	165.	3	188.	11	212.	6	236.	1	259.	9	283.	4	306.	11	330.	7	354.	2	377.	9	401.	5	425.	0	448.	7	472.	3
35	24.	4	48.	7	72.	11	97.	3	121.	6	145.	10	170.	2	194.	5	218.	9	243.	1	267.	4	291.	8	316.	0	340.	3	364.	7	388.	11	413.	2	437.	6	461.	10	486.	1
36	25.	0	50.	0	75.	0	100.	0	125.	0	150.	0	175.	0	200.	0	225.	0	250.	0	275.	0	300.	0	325.	0	350.	0	375.	0	400.	0	425.	0	450.	0	475.	0	500.	0
37	25.	8	51.	5	77.	1	102.	9	128.	6	154.	2	179.	10	205.	7	231.	3	256.	11	282.	8	308.	4	334.	0	359.	9	385.	5	411.	1	436.	10	462.	6	488.	2	513.	11
38	26.	5	52.	9	79.	2	105.	7	131.	11	158.	4	184.	9	211.	1	237.	6	263.	11	290.	3	316.	8	343.	1	369.	5	395.	10	422.	3	448.	7	475.	0	501.	5	527.	9
39	27.	1	54.	2	81.	3	108.	4	135.	5	162.	6	189.	7	216.	8	243.	9	270.	10	297.	11	325.	0	352.	1	379.	2	406.	3	433.	4	460.	5	487.	6	514.	7	541.	8
40	27.	9	55.	7	83.	4	111.	1	138.	11	166.	8	194.	5	222.	3	250.	0	277.	9	305.	7	333.	4	361.	1	388.	11	416.	8	444.	5	472.	3	500.	0	527.	9	555.	7
41	28.	6	56.	11	85.	5	113.	11	142.	4	170.	10	199.	4	227.	9	256.	3	284.	9	313.	2	341.	8	370.	2	398.	7	427.	1	455.	7	484.	0	512.	6	541.	0	569.	5
42	29.	2	58.	4	87.	0	116.	8	145.	10	175.	0	204.	2	233.	4	262.	6	291.	8	320.	10	350.	0	379.	2	408.	4	437.	6	466.	8	495.	10	525.	0	554.	2	583.	4
43	29.	10	59.	9	89.	7	119.	5	149.	4	179.	2	209.	0	238.	11	268.	9	298.	7	328.	6	358.	4	388.	2	418.	1	447.	11	477.	9	507.	8	537.	6	567.	4	597.	3
44	30.	7	61.	1	91.	8	122.	3	152.	9	183.	4	213.	11	244.	5	275.	0	305.	7	336.	1	366.	8	397.	3	427.	9	458.	4	488.	11	519.	5	550.	0	580.	7	611.	1
45	31.	3	62.	6	93.	9	125.	0	156.	3	187.	6	218.	9	250.	0	281.	3	312.	6	343.	9	375.	0	406.	3	437.	0	468.	9	500.	0	531.	3	562.	6	593.	9	625.	0
46	31.	11	63.	11	95.	10	127.	9	159.	9	191.	8	223.	7	255.	7	287.	6	319.	5	351.	5	383.	4	415.	3	447.	3	479.	2	511.	1	543.	1	575.	0	606.	11	638.	11
47	32.	8	65.	3	97.	11	130.	7	163.	2	195.	10	228.	6	261.	1	293.	9	326.	5	359.	0	391.	8	424.	4	456.	11	489.	7	522.	3	554.	10	587.	6	620.	2	652.	9
48	33.	4	66.	8	100.	0	133.	1	166.	8	200.	0	233.	4	266.	8	300.	0	333.	4	366.	8	400.	0	433.	4	466.	8	500.	0	533.	4	566.	8	600.	0	633.	4	666.	8
49	34.	0	68.	1	102.	2	136.	1	170.	2	204.	2	238.	2	272.	3	306.	3	340.	3	374.	4	408.	4	442.	4	476.	5	510.	5	544.	5	578.	6	612.	6	646.	6	680.	7
50	34.	9	69.	5	104.	2	138.	11	173.	7	208.	4	243.	1	277.	9	312.	6	347.	3	381.	11	416.	8	451.	5	486.	1	520.	10	555.	7	590.	3	625.	0	659.	4	694.	5

TABLE V.

[illegible]

TABLE V.

	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
1	5.	0.	0.	0.	5.	0.	0.	10.	5.	0.	6.	0.	1.	0.	6.	0.	7.	0.	7.	0.
2	0.	0.	0.	1.	0.	1.	0.	11.	0.	0.	1.	0.	0.	0.	0.	1.	0.	1.	0.	1.
3	0.	1.	0.	1.	0.	1.	0.	11.	0.	0.	1.	0.	0.	0.	0.	1.	0.	1.	0.	1.
4	0.	1.	0.	1.	0.	1.	0.	11.	0.	0.	1.	0.	0.	0.	0.	1.	0.	1.	0.	1.
5	0.	2.	0.	2.	0.	2.	0.	12.	0.	0.	2.	0.	0.	0.	0.	2.	0.	2.	0.	2.
6	0.	2.	0.	2.	0.	2.	0.	12.	0.	0.	2.	0.	0.	0.	0.	2.	0.	2.	0.	2.
7	0.	3.	0.	3.	0.	3.	0.	13.	0.	0.	3.	0.	0.	0.	0.	3.	0.	3.	0.	3.
8	0.	3.	0.	3.	0.	3.	0.	13.	0.	0.	3.	0.	0.	0.	0.	3.	0.	3.	0.	3.
9	0.	3.	0.	3.	0.	3.	0.	13.	0.	0.	3.	0.	0.	0.	0.	3.	0.	3.	0.	3.
10	0.	4.	0.	4.	0.	4.	0.	14.	0.	0.	4.	0.	0.	0.	0.	4.	0.	4.	0.	4.
11	0.	4.	0.	4.	0.	4.	0.	14.	0.	0.	4.	0.	0.	0.	0.	4.	0.	4.	0.	4.
12	0.	5.	0.	5.	0.	5.	0.	15.	0.	0.	5.	0.	0.	0.	0.	5.	0.	5.	0.	5.
13	0.	5.	0.	5.	0.	5.	0.	15.	0.	0.	5.	0.	0.	0.	0.	5.	0.	5.	0.	5.
14	0.	5.	0.	5.	0.	5.	0.	15.	0.	0.	5.	0.	0.	0.	0.	5.	0.	5.	0.	5.
15	0.	6.	0.	6.	0.	6.	0.	16.	0.	0.	6.	0.	0.	0.	0.	6.	0.	6.	0.	6.
16	0.	6.	0.	6.	0.	6.	0.	16.	0.	0.	6.	0.	0.	0.	0.	6.	0.	6.	0.	6.
17	0.	7.	0.	7.	0.	7.	0.	17.	0.	0.	7.	0.	0.	0.	0.	7.	0.	7.	0.	7.
18	0.	7.	0.	7.	0.	7.	0.	17.	0.	0.	7.	0.	0.	0.	0.	7.	0.	7.	0.	7.
19	0.	8.	0.	8.	0.	8.	0.	18.	0.	0.	8.	0.	0.	0.	0.	8.	0.	8.	0.	8.
20	0.	8.	0.	8.	0.	8.	0.	18.	0.	0.	8.	0.	0.	0.	0.	8.	0.	8.	0.	8.
21	0.	8.	0.	8.	0.	8.	0.	18.	0.	0.	8.	0.	0.	0.	0.	8.	0.	8.	0.	8.
22	0.	9.	0.	9.	0.	9.	0.	19.	0.	0.	9.	0.	0.	0.	0.	9.	0.	9.	0.	9.
23	0.	9.	0.	9.	0.	9.	0.	19.	0.	0.	9.	0.	0.	0.	0.	9.	0.	9.	0.	9.
24	0.	10.	0.	10.	0.	10.	0.	20.	0.	0.	10.	0.	0.	0.	0.	10.	0.	10.	0.	10.
25	0.	10.	0.	10.	0.	10.	0.	20.	0.	0.	10.	0.	0.	0.	0.	10.	0.	10.	0.	10.

## EXAMPLES.

Although the Contents so fully explain the Tables, the following Examples may not be unacceptable.

## TABLE I.

EXAMPLE I.—Required the product of 13 by 19.

Look on the right hand side of Table I for 19, and at the bottom for 13, at the angle of meeting you will find 247, the required product.

EXAMPLE II.—Required the product of 7 feet 3 inches by 11 feet 9 inches

Look for  $7\frac{3}{4}$  at the top of Table I. and for  $11\frac{3}{4}$  on the side, at the angle of meeting you will find 85 feet 2 inches, the required product to the nearest inch.

EXAMPLE III.—Required the product of  $5\frac{3}{4}$  inches by  $13\frac{1}{4}$  inches

Look for  $5\frac{3}{4}$  at the top of Table I. and for  $13\frac{1}{4}$  on the side: at the angle of meeting you will find 76 inches 2 parts, the required product to the nearest part of an inch.

## TABLE II.

EXAMPLE IV.—Required the square of 41 inches, or the product of 41 by 41.

Look in the column named Root for 41 in Table II. directly against it, and in the column named Square, you will find 1681 inches, the required square.

EXAMPLE V.—Required the square of  $31\frac{1}{4}$  inches.

Look in the column named Root for  $31\frac{1}{4}$ , directly against it in the column named Square you will find 1008 inches and 1 part, the required square to the nearest part of an inch.

## TABLE III.

EXAMPLE VI.—Required the solid content of a piece of timber, whose length is 13 feet and scantling 3 inches by 5 inches.

Find the area of its section 3 by 5 equal to 15 by Table I. under which and against 13 in Table III. you will find 1 foot and 4 inches, the solid content required.

EXAMPLE VII.—Required the solid content of a piece of timber whose length is 29 feet and scantling 11 inches by 13 inches.

Find the area of the section 143 by Table I. under which and against 29 in Table III. you have 28 feet 10 inches, the solid content required.

EXAMPLE VIII.—Required the solid content of a piece of timber 37 feet long, whose scantling is  $2\frac{1}{2}$  inches by  $3\frac{1}{4}$  inches.

Find the area of the section  $2\frac{1}{2}$  by  $3\frac{1}{4}$  equal to 8 by Table I. under which, and against 37 in Table III. you have 2 feet 1 inch for the solid content required

EXAMPLE IX.—Having collected together a quantity of Joists measuring 641 feet in length, the scantling of which being  $2\frac{1}{4}$  inches by  $8\frac{1}{4}$  inches, required the solid content.

# EXAMPLES.

169

Find the area of the section by Table I. equal to 24, under which and against 50 you will find

	ft.	in.
	8	.. 4
Multiply by.....	0	.. 12
Will give for 600 feet in length ....	100	.. 0
Under 24 and against 41 you have	6	.. 10
The sum is the solid content required	106	.. 10

EXAMPLE X.—Having a piece of scantling  $3\frac{1}{2}$  inches by  $8\frac{1}{4}$  inches, to find how much in length will make one cube foot.

Find the area of the section by Table I. equal to 29 inches, under which, in Table III. find 4 foot. against which, you will find 5 feet the length required.

If 1 foot cannot be found in the column corresponding to the given section, divide 144 by the area of the section, the quotient will be the required length.

EXAMPLE XI.—Required the length of a piece of scantling  $5\frac{3}{4}$  inches by  $9\frac{3}{4}$  inches that will make one cube foot.

The area of the section by Table I. is 56, and 144 divided by 56, gives 2 feet 7 inches for the required length.

## TABLES III. & IV.

EXAMPLE XII.—Required the solid content of a piece of square amber 29 feet long, whose side is  $15\frac{1}{4}$  inches.

In Table II. under the word root find  $15\frac{1}{4}$ , against which, under the word Square, you will find 248 for the area of its section.

In Table IV. under 200, and against 29, you have

	ft.	in.
	40	.. 3
In Table III. under 48 and against 29		
you have.....	9	.. 8

The sum gives the required content 49 .. 11

EXAMPLE XIII.—What is the solid content of a piece of square timber  $37\frac{1}{4}$  feet long, whose side is  $47\frac{3}{4}$  inches.

In Table II. under the word Root find  $47\frac{3}{4}$  against which, under the word Square, you will find 2280 for the area of its section.

In Table IV. under 2000, and against 37, you have

	ft.	in.
	513	.. 11
For ditto add .....	3	.. 6
Ditto under 200 and against 37 do...	51	.. 5
For $\frac{1}{4}$ ditto .....	0	.. 4
In Table III. under 80 and against		
37, ditto .....	20	.. 7
For $\frac{1}{4}$ ditto .....	0	.. 2

Sum gives the required content....589 .. 11



## EXAMPLES.

## TABLE V.

EXAMPLE XV.—Given the scantling of a piece of timber 2 inches by 3 inches, and the price per foot cube 2—6, to find the price of one foot in length.

Find the area of the section 2 by 3 equal to 6 on the side of Table V. against which, and under 2—6, you will find 1½d. the required price of one foot in length of the given scantling.

EXAMPLE 15—Required the price per foot run of a piece of scantling 4½ inches by 5½ inches, when the price per foot cube is 4—6.

Find the area of the section 4½ by 5½ equal to 25 by Table I. against which, and under 4—6 in Table V. you have 9½d. the required price per foot run.

EXAMPLE XVI.—Required the price per foot run of a piece of scantling 6½ inches by 7½ inches, the price per foot cube being 5—9.

Find the area of its section 6½ by 7½ equal to 49 by Table I. against which, and under 5— in Table V. you have

	s.	d.
	1	.. 8
Against 49 and under 1—6, you have		
6d. its half is .....	0	.. 3

The required price per foot run .... 1 .. 11

EXAMPLE XVII.—Required the price per foot run of a piece of scantling 7½ inches by 8½ inches, the price per foot cube being 6—3.

Find the area of the section 7½ by 8½ equal to 64 by Table I. against 32 (half of 64,) and under 5—6 in Table V. you have

	s.	d.
	1	.. 2½
Against 32, under 1—6, you find 4d.		
its half .....	0	.. 2

Sum ..... 1 .. 4½

The double of the above sum gives the  
price per foot run ..... 2 .. 9½

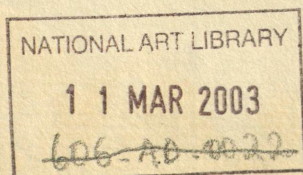
If you multiply the area of any section by the price per foot cube, and divide the product by 144, the quotient will give the price per foot run

Take the last example where the area of the section 64 extends beyond the Table. Thus, 64 multiplied by 75, gives 4800, which divided by 144, gives 33½ pence, equal to 2s. 9½d. as above.





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